

**THE IMPACT OF A HIGH STAKES ACCOUNTABILITY SYSTEM  
ON INSTRUCTIONAL PRACTICES AS PERCEIVED BY  
SOUTH TEXAS HIGH SCHOOL PRINCIPALS**

A Dissertation

by

GERARDO G. CRUZ

Submitted to the Office of Graduate Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

December 2009

Major Subject: Educational Administration

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Approved by:

Co-Chairs of Committee,	John R. Hoyle
	Humberto Gonzalez
Committee Members,	Virginia S. Collier
	Mario S. Torres
	Cathy Guerra
Head of Department,	Mary Alfred

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## **ABSTRACT**

The Impact of a High Stakes Accountability System on Instructional Practices as  
Perceived by South Texas High School Principals. (December 2009)

Gerardo G. Cruz, B.S., Texas A&M International University;

M.Ed., Texas A&M International University

Co-Chairs of Advisory Committee: Dr. John R. Hoyle  
Dr. Humberto Gonzalez

The purpose of this study was to examine the perceptions of high school principals' regarding the impact of a high stakes accountability system on instructional practices. The study assessed the differences in perception and influencing factors about the impact of a high stakes accountability system between and among high school principals based on campus ratings and selected demographic variables.

The data for this quantitative study were obtained from a 59-question survey instrument given to high school principals from 37 school districts selected from Region I of the Texas Education Service Center and 42 school districts selected from Region XX of the Texas Education Service Center. The researcher collected 92 completed surveys, or 72% of the sample.

An analysis of the data found that high school principals did indicate perceived changes to some instructional practices. The data showed a perceived increase in the use of problem-solving activities, open response questions, writing assignments, creative/critical thinking questions, peer or cross-age tutoring, interdisciplinary

instruction, facilitating/coaching, collaborative/team-teaching, modeling, cooperative learning/group work, computers/educational software, calculators, computers, internet and/or on-line research service, lab equipment, and manipulatives. Principals also indicated a perceived decrease in the use of work sheets, true-false questions; textbook based assignments, lecturing, and the use of textbooks. In addition, the data showed that high school principals' perceived changes to instructional practices were influenced most by two factors: an "interest in avoiding sanctions at my school," and an "interest in helping my students attain TAKS scores that will allow them to graduate."

The information obtained from this study can be used by researchers, educators and all stakeholders to ensure implementation of instructional practices leading to student achievement on high-stakes tests.

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## CHAPTER I

### INTRODUCTION

The skills necessary to function in society today and tomorrow will continue to be a significant factor in student success. Therefore, it is necessary for public schools to identify and teach the skills necessary for student success and lifelong learning. Our educational system must be able to produce individuals who can adapt and solve problems in every day life situations. Yet, across our nation, teachers are pressured constantly to ensure that students meet federal and state standards through the assessment for accountability systems. Many public schools struggle to teach students the appropriate curriculum and standards (Berliner & Biddle, 1995). This struggle becomes increasingly difficult when factors such as demographics are added to the equation. Our society's demographics are changing and these changes are reflected in today's classrooms. Although standards for best practice emphasize that all learners should develop in-depth understandings, high-stakes testing may push teachers who administer the tests to standardize instruction and simply "cover" content. Just covering content may therefore cause deficiencies in student learning competencies, causing repercussions in higher education and long-term learning (Schlechty, 1997).

The No Child Left Behind (NCLB) Act of 2001 has been the springboard for all standardized high-stakes testing currently taking place in our nation. Research reveals

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This dissertation follows the style and format of the *Journal of Educational Research*.

teachers often have negative attitudes toward high-stakes assessments; however, conclusions made in research by Yeh (2006) reflect a different perspective on assessments used for benchmarking student achievement. Overall, it was found that teachers are not against accountability. They recognize the inherent need to monitor student progress but question the effectiveness of high-stakes achievement testing.

The pressures exerted by the efforts to improve education by testing and accountability have had positive and negative impacts. This is largely due to the reforms mandates associated with accountability systems. It has been pointed out that standardized testing, despite research that indicates it is not developmentally appropriate for young children (Kohn, 2000). In addition to the negative effects on student learning, there are negative effects on student teaching and instructional leadership as well.

There is evidence that the campus leader is essential in order for teachers to function and perform in a high-stakes accountability system. In a recent study conducted by Kaplan and Owings (2001), the researchers surveyed teachers and concluded that teachers often looked to principals to assist them in understanding educational expectations and to provide them with the pedagogical tools necessary to help their students be successful. In doing so, teachers also indicated that when instructional best practices are implemented and supported by campus leadership, high-stakes testing is not an issue. This same study found that instructional leaders who focus on teacher empowerment and professionalism have more efficient mechanisms to help their staff deal with high-stakes testing. Furthermore, instructional leaders who are curriculum-driven view high-stakes testing as a tool to improve curriculum and instruction.

Accountability, assessment, and educational reform have been at the forefront in today's public school system since the inception of NCLB. Negative attitudes persist towards government accountability while positive attitudes exist when campus leadership embraces commitment-based strategies for reform (Leithwood, Steinbach, & Jantzi, 2002). Accountability as communicated by federal and state reformers often alludes to enhancing student achievement. However, educators feel that government accountability sets limits to classroom teaching and accountability is generally viewed as a control strategy.

Research by Popham (2001) indicates that contemporary teaching is focused mostly on success in testing and meeting imposed standards, rather than on developing critical thinking and problem-solving skills. On the other hand, Lynd (2000) suggests that in some cases, testing in numeracy and literacy helps predict future success or failure of students, schools, and districts. Such a high emphasis has been placed on the tested curriculum in reading and math that students have been deprived of other important content areas. In doing so, instructional practices have suffered because teachers focus on test preparation and test taking strategies (Nichols & Berliner, 2007).

In his book, *Educational Wastelands*, Arthur Bestor (1985) comments that a sound education involves a grasp of the "essential intellectual tools," and "a store of reliable information which the mind can draw upon," as well as practice in "the systematic ways of thinking developed within the various fields of scholarly and scientific investigation" and "the culminating act of applying this aggregate of intellectual powers to the solution of a problem." Today's educational system fails to

provide these qualities in an efficient and meaningful way, largely due to an overemphasis on testing. This practice of teaching to the test and omitting content from the curriculum is creating a negative effect on student learning and academic achievement.

One problem faced by many educators within their districts is competition between schools and collective pressure to report test results. Taxpayers receive a yearly progress report on how their school districts are fairing. This progress report affects housing, school taxes, and an array of neighborhood issues. Rising taxes and neighborhood issues are blamed on failing schools and the pressure mounts for schools to perform well on tests. When test results are made public in this way, the pressure is on teachers, administrators, students, and families to appease taxpayers. As Leithwood (2001) pointed out, this kind of accountability creates a silent competition between schools, creating a “market” accountability system characterized by open boundaries, school privatization, charter schools, magnet schools, vouchers, and tuition tax credits.

One of the current issues facing educators is how to adapt instruction to meet the diverse needs of students and to identify and build upon the learning competencies needed for student success for entire school systems (Perreault & Lunenburg, 2002). Research points to key competencies necessary for students to be successful in school and higher education. These basic skills include reading, writing, mathematics, thinking skills, personal skills, ability to allocate resources, ability to work in groups, ability to acquire and evaluate data, an understanding of organizational structures, and the ability

to use and select appropriate technologies (National Association of State Boards of Education, 2002).

### Problem Statement

A study conducted by the Marion and Sheinker (1999) confirms what many educators have feared: The curriculum is narrowing as schools zero in on reading, writing, and mathematics at the expense of the arts, foreign languages, and elementary-level social studies. In addition, educational accountability systems that use test scores as the primary measure of performance are used in many states. Research has shown that such high-stakes testing can have negative consequences including narrowing of the curriculum and overemphasizing decontextualized skills (Stecher, 2001).

High-stakes accountability places a focus on the tested curriculum. In doing so, it has increased the gaps that occur as a child progresses through grade levels (Hoyle, Bjork, Collier, & Glass, 2005). There are many more questions. Among the questions these gaps generate are these two: Are public schools producing narrow minds and exacerbating the current state of affairs in public school education and beyond by teaching to the test and emphasizing test taking strategies? Are campus leaders making the necessary changes to improve instruction? Unfortunately, little is known regarding the impact of high-stakes testing on student academic success in South Texas high schools. Even outside of South Texas, scant research is available on the opinions of high school principals about changes to instructional practices.

### Purpose of the Study

The purpose of this study is to examine the perceptions of principals in South Texas high schools in Educational Service Centers I and XX regarding the impact of a high-stakes accountability system on instructional practices and to assess the factors influencing changes to instructional practices. The study will assess the differences in perception about the impact of a high-stakes accountability system between and among high school principals based on campus ratings. In addition, the study will determine the differences in perceptions toward the impact of a high-stakes accountability system based on selected demographic variables.

### Research Questions

This quantitative study was guided by the following research questions.

*Research Question 1:* What are the perceptions of high school principals regarding the impact of high-stakes accountability on instructional practices?

*Research Question 2:* Based on campus, state, and federal academic performance ratings, what are the differences in perceptions between high school principals regarding the impact of a high-stakes accountability system on instructional practices?

*Research Question 3:* What are the differences in perceptions regarding the impact of a high-stakes accountability system among principals based upon gender, years of classroom teaching experience, years of experience as an administrator, years of experience as a principal prior to the implementation of TAKS and or NCLB,



years of experience as a campus principal, and location by Educational Service Center (Regions I and XX)?

*Research Question 4.:* What factors are currently influencing changes to instructional practices?

### Operational Definitions

The findings of this study should be considered within the context of the following definitions of operational terminology.

*Instructional Practices:* Teaching strategies, teaching techniques and teaching tools that guide interaction and learning in the classroom (Zemelman, Daniels, & Hyde, 2005; Downey, Steffy, Poston, & English, 2009).

*High-stakes Accountability:* A term used to describe a system of rewards and sanctions that are directly tied to student performance on an assessment instrument.

*Accountability System:* A system of evaluation “grounded on the belief that all students can learn,” with an “emphasis on increasing all students’ performance” (Alford, 2001, pp. 113, 115).

*Campus Administrators:* These include principals in elementary (grades K-5th) schools, principals in middle schools (grades 6th-8th) and principals in high schools (grades 9th-12th).

*South Texas School District:* A school district that is located in either Region I or XX of the Texas Educational Service Center (ESC).

*Accountability Rating:* This refers to the campus rating assigned by the Texas Education Agency's state accountability system. Campuses are evaluated on performance on the Texas Assessment of Knowledge and Skills (TAKS). Possible ratings are Exemplary, Recognized, Academically Acceptable, and Academically Unacceptable (Texas Education Agency, 2008b).

*Texas Assessment of Knowledge and Skills (TAKS):* The Texas Assessment of Knowledge and Skills test was implemented in Spring 2003. By law, all eligible Texas public school students are assessed in mathematics in grades 3 through 10 and exit level, in reading in grades 3 through 9, in writing in grades 4 and 7, in English language arts in grades 10 and exit level, in science in grades 5, 8, 10, and exit level, and in social studies in grades 8, 10, and exit level (Texas Education Agency, 2008 b).

*Exemplary Rating:* Exemplary is the highest possible rating of the Texas Education Agency's accountability system. To achieve this rating, at least 90% of the tested students must pass each subject area and the district or campus must meet the standards for the Exemplary rating on the completion and dropout indicators (Texas Education Agency, 2008b).

*Recognized Rating:* Recognized is the second highest possible rating of the Texas Education Agency's accountability system. Districts and campuses must have at least 75% of the students who are tested pass each subject or demonstrate sufficient levels of required improvement. The district or campus must also meet

the standards for the Recognized rating on the completion and dropout indicators (Texas Education Agency, 2008b).

*Academically Acceptable Rating:* Academically Acceptable is the third highest possible rating of the Texas Education Agency's accountability system. Districts and campuses must have the set minimum number of the students who are tested pass each subject or demonstrate sufficient levels of required improvement. The district or campus must also meet the minimum standards for Academically Acceptable rating on the completion and dropout indicators (Texas Education Agency, 2008b).

*Academically Unacceptable Rating:* Academically Unacceptable is the lowest possible rating of the Texas Education Agency's accountability system. A school or district with this rating is subject to interventions and sanctions specified in Chapter 39 of the Texas Education Code (Texas Education Agency, 2008b).

*Adequate Yearly Progress (AYP):* Adequate Yearly Progress (AYP) was established under the accountability provisions of the No Child Left Behind Act, requiring all public school campuses, school districts, and the state to be evaluated for adequate yearly progress. Districts, campuses, and the state are required to meet AYP criteria on three measures including Reading Language Arts, Mathematics, and either Graduation Rate for high schools and districts, or Attendance Rate for elementary and middle or junior high schools (Texas Education Agency, 2008c).

*Meet AYP:* This designates a district or campus that meets AYP standards on all indicators for which it is evaluated (Texas Education Agency, 2008c).

*Missed AYP:* This designates a district or campus that does not meet AYP standards on one or more indicator components. The Missed AYP label may also be assigned to a district or campus in the rare situation where the accuracy and/or integrity of performance results have been compromised (Texas Education Agency, 2008c).

*Impact:* This is defined as “the force of impression of one thing on another,” or “a significant or major effect.” (Merriam-Webster Online Dictionary, 2009)

### Assumptions

It is assumed that the participants/principals answering the survey will understand the study, understand the survey instrument, and will be proficient and objective in self-reporting. Data analysis and disaggregation accurately reflects the intent of the participant/respondent. The methodology of the study is logical and appropriate for this research project.

### Limitations

The study is limited to select South Texas school districts within the Educational Service Centers Regions I and XX in Texas. The results of this study are limited by the accuracy of the principals. Findings are generalized only to South Texas School District within the Educational Service Centers Regions I and XX in Texas. This study is limited to the information acquired from the survey instrument and literature review.

## Methodology

### *Population*

The survey population for this study included 92 high school principals from 37 school districts selected from Region I of the Texas Education Service Center and 42 school districts selected from Region XX of the Texas Education Service Center. Charter schools, private schools and alternative education schools were not considered for the purposes of this research study. Sixty-seven public high schools in Region I and 60 public high schools in Region XX listed in the Texas Education Agency's 2007-2008 School Directory were selected for this study. Responses from 92 high school principals of the listed 127 public high schools in the Education Service Center Region I and Region XX comprised the population for the study.

### *Instrumentation*

The researcher utilized a survey instrument based on Vogler (2000) and on the literature following guidelines by Gall, Borg, & Gall (1996). The survey instrument consisted of a demographic information section and a section to document the degree to which high school principals perceive the impact of high-stakes accountability on instructional practices. The survey instrument was divided into three parts. Part I covered Instructional Practices, Part II was Influence Factors, and Part III contained Demographic Information. For Part I of the survey, a Likert-type scale was used, with responses designated "LD" for a large decrease, "D" for a decrease, "S" for same, "I" for increase, "LI" for a large increase, and "NA" for not applicable. The following point system was used for survey analysis. Responses for "LD" for a large decrease were

given the value of “1.” Responses for “D” for a decrease were given a value of “2.” Responses for “S” for the same were given a value of “3.” Responses for “I” for increase were given a value of “4.” Responses for “LI” for large increase were given a value of “5.” Responses of “NA” for not applicable were given a value of “0.”

For Part II a Likert-type scale was used, with responses designated “SD” for strongly disagree, “D” for disagree, “U” for undecided, “A” for agree, and “SA” for strongly agree. The following point system was used for survey analysis. Responses for “SD” for strongly disagree were given a value of “1.” Responses for “D” for disagree were given a value of “2.” Responses for “U” for undecided were given a value of “3.” Responses for “A” for agree were given a value of “4.” Responses for “SA” for strongly agree were given a value of “5.”

In Part III, principals were asked to give demographic information about themselves, which included the following: gender, years of classroom teaching experience, years of experience as an administrator, whether or not the participant was a principal prior to the implementation of TAKS and or NCLB, years of experience as a campus principal, campus AYP status, AEIS campus rating, and location (Educational Service Center Region I or Region XX).

### *Procedure*

Each identified participant received a cover letter electronically, assuring subject confidentiality and received instructions for the completion of the online survey. The electronic request sent to each participant included a link to the online survey. Appendix

A contains the survey and cover letter. The researcher had access to the data via the online survey web host.

### Data Analysis

The results of the study were reported using appropriate quantitative statistics as delineated by Gall, Borg, & Gall (1996). The data collected from the instrument was analyzed with a statistical analysis software program. The researcher used analysis of variance, multivariate analyses (Post Hoc analyses), mean scores, standard deviations, frequencies, and correlation.

### Significance of the Study

Superintendents, campus administrators, district leaders, and finance officers will be able to utilize the results of this study to ensure that student achievement is not for the moment, but for life. Today's school environment is characterized by high-stakes testing and accountability. Applied to school improvement, high-stakes testing and accountability have consequences for students, their schools, their districts, and to a degree their teachers and principals. To meet these challenges, districts have had to make major overhauls regarding curriculum and instruction via more centralized control and more effective command structures. The reform movement is playing a vital role in decreasing the achievement gap in all demographic groups. As a result, schools and school districts have attempted to develop a high-quality curriculum that is based on state academic standards while incorporating proven instructional practices. The

development of a standards-based curriculum, transformational leadership, and the collaborative role that campus leaders play all make an impact in the way teachers teach and schools are organized. However, as principals strive to meet accountability demands and focus on teaching the tested curriculum, they may increase the gap among students and between students as they progress through grade levels (Rothstein, 2004).



## **CHAPTER II**

### **LITERATURE REVIEW**

A careful and methodical review of literature relevant to the topic of this study was conducted by the researcher using various library and online resources. The reviews focused on accountability, student achievement, curriculum, learning, instruction, instructional leadership, and instructional best practices. The literature review will begin with accountability as it pertains to education.

#### **Accountability**

As part of the accountability system, states have instituted comprehensive assessments to measure student achievement. According to the United States Department of Education (2008), states are required to set standards delineating what students should know, align their curriculum and instruction to these standards, measure the performance of students against said standards, report the results of the performance to the public, implement improvement strategies, and provide support services and expanded choices to students in underperforming schools. While these initiatives seem to be in the best interest of the student, sanctions implemented for failure to succeed in these endeavors have negatively affected student learning and achievement (Kozol, 2005).

Supporters of current accountability systems claim that mandates such as high stakes testing and related guidelines are based on research (Scheurich, Skrla, & Johnson, 2004; Skrla & Scheurich, 2004) and will assist all students in meeting achievement

goals. Advocates contend that high stakes testing is needed in order for achievement tests to be taken seriously and in order to obtain valid and reliable evidence of student learning. Data shows states that have incentives and sanctions have students who are making gains when compared with states with weak or ineffective accountability systems, as shown by state achievement tests and the National Assessment of Educational Progress (NAEP) test (Westchester Institute for Human Services Research, 2003). Additionally, evidence from Carnoy and Loeb's 2002 research indicates that states with effective accountability systems are making gains in shrinking the achievement gap of African Americans and Hispanic students.

The No Child Left Behind (NCLB) Act of 2001 is dramatically affecting the nation's educational system. While most individuals agree that some form of accountability system is necessary to assess student progress, most also agreed that NCLB is not as effective as originally anticipated. Smyth (2008) gives a brief history of testing in the United States and an overview of how assessment came to be so "valued" in our society. For some time now, assessment has been the main vehicle for measuring student success. However, since the advent of NCLB, the pressure to succeed in these assessment measures has increased. High-stakes testing has placed both students and teachers in a position of learning and teaching to the test through test taking strategies, practice tests, and drill activities. This does little to ensure academic success of students; it merely measures how well a student can take a test. As stated in previous research, Smyth also suggests that teaching to the test is eliminating students' ability to problem

solve and teachers' creativity in the classroom. It also creates an unhealthy and sometimes unethical form of competition within school districts.

### Impact of Assessment on Student Achievement

Nichols and Berliner (2007) have done extensive research as to the effects of high-stakes testing on student achievement. Their research data indicates that as educators narrow the curriculum and stress test preparation strategies scores do increase, but at the expense of long-term learning and the meaningfulness of reported test scores. With so much emphasis placed on student achievement, many times educators become so desperate that they end up teaching to test instead of teaching to learn. The researchers point out examples in which schools have committed vast amounts of instructional time to drilling, memorization, test taking strategies, emphasizing only tested objectives, and administering multiple choice practice tests. Consequently, these practices result in a misrepresentation of test results. Instead of the test results providing an accurate measure of what students have learned, they provide a measure of how well students were able to memorize and perform at much lower levels. It is at this point that it becomes difficult to compare students within different classrooms, schools, districts, and states. The practice of genuine instruction is taking a back burner to learning for the moment rather than learning for life. This practice is not only affecting learning but also having a detrimental effect in terms of curriculum insensitivity. As such, the question that needs to be asked is how does high stakes testing affect student achievement?

A high stakes accountability system could increase instructional resources and improve teachers' teaching skills (Cizek, 2001). Teachers often go through professional development centering on standards-based instruction, data analysis, student accommodation training, and differentiated instruction. Students could be given the opportunity for acceleration and remediation, as well as the opportunity for more parental and community involvement. Furthermore, teachers could receive monetary incentives and awards for student achievement.

Valenzuela (1999) notes that schools may be subtractive in ways that extend beyond the concept of subtractive cultural assimilation to include the content and organization of the curriculum. In many cases, the content and curriculum is organized around the accountability system in place. The American public school system is in fact driving children out of school through cultural insensitivity, making it more difficult for students to perform well on tests, and further widening the achievement gap when minority groups are compared.

High-stakes tests do not measure the entire curriculum and due to the impact that failure has on the schools, teachers are often faced with narrowing the curriculum to address tested material and sacrificing content. In order to do this, teachers spend more time on test strategies than on content and concept learning for the students. While this is done in an effort to facilitate students passing the test, what individuals fail to realize is that accountability tests fail to distinguish between good and bad instruction. High-stakes testing affects students' ability to think creatively and does not require higher order thinking skills. Although this is a commonly known fact, test scores have become

so important that teachers are beginning to focus their attention on drilling students to be successful on these exams. Critical information is often bypassed merely because it is not part of the assessment. Curriculum should be aligned to the standards that are to be tested in the accountability system. This leads us to the assumption that high-stakes testing provides us with an assessment of instructional quality (Popham, 2008).

Many facets of data coming from standardized tests provide evidence of gains in student learning within the age of accountability. Results from the National Assessment of Educational Progress (NAEP) show that reading and mathematics scores have increased from the 1970s to the 1990s (Chatterji, 2004). Evidence also shows that during the 1990s, Texas showed gains in its high stakes testing programs (Carnoy, Loeb and Smith, 2000; Skrla, Sheurich, Johnson and Koschoreck 2004).

### Impact of Assessment on Curriculum

The impact that high-stakes testing has had on the curriculum implemented in schools today is extensive. Curriculum is the fundamental work plan for what goes on in schools (Downey, 2003). Curriculum itself is increasingly compounded by more objectives and standards to be taught in our schools today. However, the hidden curriculum in our school is much narrower. Due to the pressures of high-stakes testing, teachers and administrators are facing the difficult task of meeting state and federal mandates. This task translates into a watered down curriculum that focuses on test taking strategies or “is primarily focused on attaining the goals and objectives explicit and implicit in the program of testing and assessment.”

As stated by Nichols and Berliner (2008), all across the nation, time spent on subjects not tested has been diminished or eliminated. This can be seen in the areas of art, music, and social studies. These types of practices lead students to be unmotivated to learn and uninterested in school. This may have detrimental effects for students because their abilities are defined by their success on a test leading to the test.

According to Nichols & Berliner (2007), education is facing the challenge of maintaining a rigorous curriculum in a time when drilling and practice testing is increasingly common. Because of these legal mandates of accountability, pedagogy and the teaching profession as a whole are suffering. Nichol & Berliner suggest that teachers may be limited to the imposed curriculum, which stifles their creativity and decision making in their classrooms. The federal accountability system imposed by NCLB has placed the focus on reading and math, often leaving other equally important subjects to be taught minimally. This also contributes to teachers' perceptions that they are not given the opportunity to integrate other subject areas into their teaching practice because they must adhere to the prescribed curriculum. As noted in this and other research, teachers do recognize the importance of the accountability system; however, they also recognize the importance of teaching students for lifelong learning and not just teaching them to pass an exam, which can harm students' future success (Anderson, 2001; Gordon, 2000). Because teachers are often faced with teaching a narrower curriculum that focuses on high-stakes testing, many of them are leaving the teaching profession altogether. Teachers perceive they are being tied down to this narrow curriculum and

that this curriculum does not allow for deviation or “teaching in the moment” (Nichols & Berliner, 2007).

Research has indicated that the prevalence of high-stakes testing in our educational system has consequently narrowed the curriculum to focus on reading and math in particular. However, this focus has not necessarily improved the quality of instruction in these or other subjects. In reality, high-stakes testing has not only limited the content being taught of such subjects as social studies and science, but it has also limited instruction in the tested subjects of reading and math. High-stakes testing has largely supplanted literacy assessment in the United States (Higgins, Miller, & Wegmann, 2006). This shift of focus from instruction to assessment has brought many negative effects to instruction and student learning. Teachers and administrators often succumb to the pressures of accountability and the use of drilling students and teaching test taking strategies. Higgins et al. points out that this practice results in narrowing the curriculum, loss of instructional time, and loss of teacher autonomy. The message that these high-stakes tests send to students is that their success on the test is more important than actual learning. The assessment of student learning can emphasize the wrong things and inadvertently misdirect subsequent student learning away from a more authentic understanding of the curriculum (Sergiovanni & Starratt, 1998).

### Impact of Assessment on Learning and Instruction

Research by Watanabe (2007) notes that increased emphasis on high-stakes testing has negatively affected student learning and instruction. Teachers and students

are spending more time on test taking strategies and practice tests than on content learning. Therefore, students are missing out on authentic meaningful learning that can be translated into lifelong education. The research indicates there are various factors that may affect the influence of high-stakes testing on teacher instruction. These include the rewards and punishments associated with test scores, the nature of the tests (for example, multiple choices versus open-ended questions), as well as individual teacher beliefs. In addition, student demographics and school policy are factors that influence teacher instruction. Watanbe (2007) also noted that the quality of instruction varies with different student populations and that district and campus support for quality instruction is an important factor to consider.

The educational field is greatly affected as teachers are finding it difficult to stay away from “teaching to the test.” As Kohn (2000) states, teachers who drill students and have them practice test taking strategies are simply creating good test takers. Popham (2001) argues that teachers are under great pressure and that they leave out subjects that are not tested. He quotes the following comment from a teacher, “If our chief job is to raise test scores, why waste time teaching content that's not even tested?” (p. 15). Smyth (2008) contends that teachers are not against accountability; however, they believe that high-stakes testing creates an unbalanced curriculum, places excessive pressure on both students and teachers, contributes to a high turnover rate in the teaching profession, and generally has a negative effect. More attention needs to be placed on the instruction taking place in the classroom and what our students need to learn to be successful in life, rather than on the test scores.



An example of the negative effects of high-stakes testing found in research is that despite the growing importance of scientific knowledge, it has been found that Americans are unfortunately ignorant of basic scientific facts (Sykes, 1995). The rigid structure and accountability mandates make it difficult for teachers to monitor students' overall academic progress or collaborate across the curriculum on strategies to enrich learning experiences, address problems, or accommodate different learning styles. The placement of emphasis on "passing the test" reduces the academic rigor necessary for student success in the postsecondary system.

As previous research has noted, teachers and students are not given the opportunity to engage in authentic meaningful activities that would provide students with lifelong learning skills. It has been noted that instructional time is spent practicing for assessments rather than on actual instruction and learning. Research by Higgins et al. (2006), which focused on writing, indicates that students who are provided with high quality evidenced based instruction will in fact do better on assessments than students who are subjected to the "drill and kill" practice. Research also states that narrowing the curriculum to test preparation does not provide students with skills that will be useful for real-world application. Research has also indicated that the current accountability system fails to recognize the academic needs of individual students and that the push for better results on accountability measures has limited the resourcefulness of our teachers (Chapman, 2007).

Critics, however, must understand that state accountability systems need to be given credit for gains in student learning. The basic components of accountability

systems include instructional purposes, a focus on professional development, emphasis on state curriculum standards, mechanisms for support, and a reliance on data to make instructional decisions. All of these components ensure that learning takes place (Elmore 2000, 2001).

Successful schools focus their efforts on higher order pedagogy. This is achieved through tighter organizational structures and positive external influences. Positive external influences have proven to be the most effective when the school system works in conjunction with an external organization with the sole purpose of improving instruction (Perreault & Lunenburg, 2002).

Professional development for teachers, also an accountability component, improves teachers' teaching skills and is directly related to student learning. The professional development activities must be aligned with state standards and accountability expectations (Adams & Kirst, 1999). The campus administrator thus becomes central to the success of the professional development model. Support structures must be in place for professional development to take root (Leithwood & Louis, 2000).

Critics of high stakes testing and accountability contend it causes narrowing of curriculum. Coherent, relevant state standards can improve teaching and learning and provide a focus for student improvement (Lunenburg & Ornstein, 2000). Part of accountability mandates that each state develops curriculum standards as part of its testing program. With this in mind, states develop tests that measure learning based on specific state standards (English & Steffy, 2001). Again, data stemming from the Texas

accountability system shows student gains on standardized tests (Skrla & Scheurich, 2001).

Accountability systems often face barriers to implementation. One barrier to the success of these systems is teachers (Perreault & Lunenburg, 2002). Teachers must be supported via relevant training and access to instructional tools. Teachers must also be taught to recognize which students require acceleration and remediation. Many state accountability systems disaggregate student achievement data that is used to address student deficiencies. Research has shown that teachers will perform better when they are supported and are given the resources necessary to influence teaching and learning (Lunenburg, 1995; Lunenburg & Ornstien, 2000).

Reliance on data to make instructional decisions is also part of accountability systems (Perreault & Lunenburg, 2002). Many systems already disaggregate standardized test data by specific curriculum objectives and standards. These same systems also rank schools and districts based on test results. This practice recognizes good performance while at the same time putting pressure on low performing schools. It also provides schools with a plan to target weak objectives and to improve professional development.

### Assessment and Instructional Leadership

Instructional leadership must address areas in need of improvement in a more meaningful way, beyond just passing the tests. Chapman (2007) discusses the importance of improving our current practice of high-stakes testing. While it is

recognized that assessments are necessary for accountability purposes, it is noted that there are areas of improvement that need to be addressed. Chapman suggests three approaches to address improvement. These are instituting diagnostic tests, implementing end-of-course examinations, and aligning assessments to college requirements. These approaches are suggested in an effort to make better use of our current assessment formats. Diagnostic tests are recommended for the purpose of early identification of student strengths and weaknesses. Using diagnostic tests allows instruction to be tailored to students' current needs. The second recommendation of end-of-course examinations addresses the issue of students not taking the assessment process seriously. According to the article, such exit exams can determine and ensure that a student has acquired the necessary information and mastered the necessary skills taught in the course. This ensures that the students have met the grade level standards. Finally, it is recommended that assessments be aligned with college requirements. As it stands today, many students have to enroll in remedial college courses. Currently, Texas has embedded questions from state college placement tests in mandated statewide high school assessments. These strategies are proposed in an effort to improve the educational system and to support higher education as well.

Research by Sternberg (2007) indicates the importance of implementing assessments that measure student knowledge more accurately because of the failure of high-stakes testing to measure student creativity, wisdom, ethics, and other lifelong learning skills. In addition, Sternberg states that teaching for these concepts rather than

memorization of facts increases the abilities of student to do well on other assessment measures.

Much research has shown how teachers can influence student success in regards to high-stakes testing. Work by DeMoss (2002) focuses on the impact principals have on the success of students on standardized assessments. Instructional leaders who focus on teacher empowerment and professionalism have more efficient mechanisms to help their staff deal with high-stakes testing. Working to build the capacity of the instructional team leads to increased success in student assessment. When the focus is shifted to instruction rather than high-stakes testing, the results are positive and long-term in nature. Curriculum driven principals view high-stakes testing as a tool to better the curriculum and instruction. Using the assessments as diagnostic tools to determine the growth of the students and identify needs for intervention takes the pressure off students and teachers. Through positive principal relationships with staff and data driven instructional decisions, student performance data shows steady increases on standardized assessments.

The role of the campus leader is essential in order for teachers to function and perform in a high-stakes accountability system. In a recent study conducted by Kaplan and Owings (2001), the researchers surveyed teachers and concluded that teachers often looked to principals to assist them in understanding educational expectations and to provide them with the pedagogical tools necessary to help their students to be successful. In doing so, teachers also indicated that when instructional best practices are implemented and supported by campus leadership, high-stakes testing is not an issue.

The campus focus is shifted back to instruction rather than assessment. In contrast, research points out that when relevance is taken out of the curriculum and a focus placed on passing the “test,” learning is impaired. Finally, Kaplan and Owings conclude that principals who emphasize students *learning* the content rather than *covering* the content can better assist teachers in producing successful learners.

According to Yeh (2006), schools that periodically assess students with rapid assessments or curriculum-based measurements show gains on state mandated tests when correlation analyses are calculated. Principals who rely on this data were better able to make instructional decisions, identify students in need of remediation, and better prepare teachers in terms of professional development. Yeh pointed out that rapid assessments provide immediate teacher feedback and the assessments measure what is learned in the classroom as it relates to state standards. In doing so, the curriculum is tested rather than testing what needs to be taught (teaching to the test) in order to pass state assessments.

In this age of accountability measures, it becomes increasingly important for educational leaders to maintain and interpret data correctly in order meet student needs. The focus is on student achievement and the use of data is directly related to effective schools. Marzano (2003) makes note of two common mistakes associated with the use of data. One common mistake is the use of measures that are not reflective of classroom instruction. State standardized tests are often not reflective of the learning that is actually occurring. Despite the fact that state assessments measure state standards, they often do not provide an accurate measurement of student learning and should not be the sole

source of indication for student achievement. A school or district must use assessments that actually measure the content that teachers teach.

The second common mistake pointed out by Marzano (2003) is the failure of schools and or districts that have no system or plan for interpreting and using the data. It has been noted that all too often school districts misuse or misinterpret student data. There are some assessments that are meant for use as diagnostic tools to measure the progress of students so that teachers can modify instruction accordingly. However, these assessments are looked upon as a direct correlation to the state assessments and their projected success or failure. This becomes an area of concern when district data and state data are not measuring the same thing, yet are given equal emphasis.

At the school level, certain factors are critical to student success. These include providing challenging goals and effective feedback, involving parents and the community, and maintaining a safe and orderly environment and school culture (positive relationship). At the teacher level, there are three factors critical to student success. These are instructional strategies, classroom management, and classroom curriculum design. Finally, critical factors at the student level include home atmosphere, learned intelligence and background knowledge, and student motivation (Marzano, 2003).

It should be noted that teachers view autonomy as a major contributing factor to effective teaching. Crocco (2002) states that teachers seek support in the form of effective leadership from principals. This allows them to make good decisions during the planning process. According to Crocco, “good principals provided space for decision

making and helped mitigate rather than enforce the pressures and frustrations brought about by the new regime of accountability” (p. 529).

Research indicates that effective school and/or district leadership directly affects student achievement. There are exceedingly high pressures associated with high-stakes testing and the current accountability system. Waters, Marzano, and McNulty (2004) found that leadership is a critical factor and that there is a positive correlation between effective school leadership and student achievement, “as leadership improves, so does student achievement.” In addition, Waters et al. identified 21 key areas of leadership responsibility, which are embedded within the superintendent competencies. According to the article, the leadership areas include culture; order; discipline; resources; curriculum instruction and assessment; knowledge of curriculum, instruction and assessment; focus; visibility; contingent rewards; communication; outreach; input; affirmation; relationship; change agent role; optimizer role; ideals and beliefs; monitoring and evaluation; flexibility; situational awareness; and, intellectual stimulation.

Another important aspect includes the differential impact of leadership. It is noted that there are two factors affecting the positive or negative impact of leadership. These are the focus of change and the order of change. In order for leadership to be effective, leaders need to identify the focus of change, and in what order the change will be implemented (Waters et al, 2004). In other words, instructional leaders have to plan for change. In order to maintain success in this time of high-stakes testing and



accountability, leaders need to provide effective leadership and plan accordingly to ensure student success.

With current accountability systems, educators view accountability with negative consequences. Rather than controlling the educational system, educators and campus administrators feel that commitment strategies are more productive than accountability (Leithwood et al., 2002). In order for these strategies to be effective, it is essential that campus leaders foster buy-in by staff. Leithwood et al, 2002 contends that transformational leadership lends itself to educators making use of accountability mandates for their own purposes in order to improve instruction by teachers as well as improving how students learn the lessons

Effective leadership is a necessary component in order to achieve the necessary results mandated by the current accountability system. Leaders must take responsibility and be held accountable for poor results (Ruebling, Stow, Kayona, & Clarke, 2004). The first component for which effective instructional leadership is required is the development of the curriculum. The issue in terms of accountability is that the implemented curriculum and the documented curriculum are often not the same. Under pressure to perform well in subjects that are tested, teachers engage in repetitious instruction that consist of isolated bits of information, thus diminishing the time for interdisciplinary activities or projects (Nichols & Berliner, 2008).

Leaders need to provide support in order to maintain the focus on instruction. This often requires that leadership provide a change of perspective to educators, community, and students alike. This may take time, and all too often time is not

something that districts have. The federal and state mandates require yearly progress. In an effort to maintain this progress, districts have attempted the standards-based and standards-embedded curriculum design. However, it is important to note that proper implementation and monitoring must start with the principal providing the leadership and understanding of the process and his or her ability to communicate this process to all stakeholders.

Schmoker and Marzano (1999) state that standards aligned with appropriate assessments can help realize the dream of learning for all. However, the key term in that statement is “appropriate assessment.” Key points that make the most of standardized assessments have been identified by research. These key points coincide with what an effective district leader should be following in his or her role as principal. According to Schmoker and Marzano, you should start with the standards that are assessed. In the case of this study, these are the Texas Essential Knowledge and Skills (1998). The next step is to go beyond the standards that are assessed. Too often educators focus on the standards that were assessed the previous year and not on the concepts that students should be learning. Finally, standards should be made clear and concise so that all stakeholders understand them. Formulating a coherent curriculum that encompasses standards and standards-based assessment is the responsibility of district leaders.

It is important to note that strong instructional practices need to be supported by the instructional leader in order for them to be successful and be sustained with the school system (Adams & Kirst, 1999). The goal is to achieve optimal instruction, thereby resulting in higher assessment scores. Educational leaders should refocus the

mission and vision of their school to reflect the importance of life-long learning, learning that will endure and will improve a student's performance not only in assessment but also in his/her future (Leithwood, 2001).

Perceptions of principals play an important role in increasing student performance. A study by McCall (2003) studied principals' perceptions of the Massachusetts Comprehensive Assessment System. This qualitative study found that principals believed the release of state mandated assessment results helps to motivate teachers to increase student performance. McCall also found that the release of test scores places pressure on principals to align curriculum and make instructional changes. Principals' observations of teachers are perhaps the best way to gauge teaching effectiveness, to keep teachers accountable for student learning, and to rate teacher performance. Mandates dictate more accountability of instructional programs and methods (Gordon & Meadows, 1995). Furthermore, data from teacher observations can be used to improve instruction. Data gathered can be shared with teachers and pertinent staff in school improvement. As data is collected, trends instructional practice (Skretta, 2007). In order to be instructional leaders, principals should focus on instruction and center their attention to what is happening in the classroom. However, being in the classroom is not enough. Principals need to be able to identify instructional best practices and facilitate the implementation of instructional best practices. This often means that principals must be part of the professional development process by attending teacher trainings, collaborating with other principals, and establishing mentorship programs. In many instances, it is only through teacher trainings that principals know

what to look for during classroom walkthroughs and teacher observations. Principals must also review lesson plans and work collaboratively with teachers. In doing this, principals can become aware of instruction that works (Frey & Fisher, 2009).

Accountability systems have increased the effort and time put forth by principals to improve test scores. McCall (2003) found that principals were placing more time and effort in making improvements to curriculum and instructional practices than before the implementation of high-stakes accountability.

Reed, McDonough, Ross, and Robichaux (2001) found that principals from high performing schools place less emphasis on their staff to increase student performance on state assessments. Conversely, principals from low performing campuses place much more pressure on teachers to improve student performance and are constantly aware of the consequences associated with not meeting state mandated expectations.

### Instructional Best Practices

Instructional best practices are teaching practices that guide student learning. These practices influence students' cognitive development. Effective practices have been identified through research on student learning and student achievement. Research continues to confirm the positive results from the use of more progressive teaching strategies rather than traditional teaching strategies. Best practices provide better preparation for students to excel in assessments and learning (Cotton, 1989, 1999; Zemelman et al., 2005; Berliner, 2007; Downey et al., 2009).

Several strategies are reinforced by research, including the idea that learning is constructed by the student as he or she is provided with experiences and that these experiences then provide the students with a foundation for success in the content areas. This in turn results in better scores on assessments in general. Higgins et al. (2006) provides information on the traditional test preparation for writing that has taught students formula writing that leaves little room for creativity and interpretation. It was found that when students are provided with instruction in writing that focuses on the thought process and problem solving, the skills that are acquired could be implemented in all subject areas. Berliner (2007) points out that many well-researched instructional practices hardly make it into the classroom. Glickman (1991) points to several ineffective classroom practices, which include tracking students, grade level retention, corporal punishment, and the use of irrelevant instructional activities. Glickman contends that these practices still exist.

Common recommendations of national curriculum reports indicate that there should be more responsibility transferred to students, more choices for students, more cooperative and collaborative activity, and more use of authentic assessment (Cotton, 1999; Zemelman et al., 2005). The purpose of education and the educational system is to meet the academic needs of our students to ensure success both in and out of school. This requires the implementation of a challenging curriculum and the provision of quality instruction for our students. Best practices must be implemented in such a way that students are doing more than simply receiving and storing information. According to Williams (2003), school curriculum and instruction must therefore incorporate new

definitions of intelligence, alternate forms of assessments, increased collaborative learning, use of innovative and adaptive instructional strategies, and most importantly, a focus on problem solving and the use of concepts and skills applied to real-world settings.

Zemelman et al. (2005) identify seven structures of best practice teaching. These are small group activities, reading as thinking, representing to learn, classroom workshop, authentic experiences, reflective assessment, and integrative units. Small group activities in the classroom setting make use of such instructional strategies as collaborative learning, while reading as thinking or reflective strategies make use of strategies that encourage students to participate in discussion and critical thinking.

Marzano, Pickering, and Pollock (2001) have also documented instructional practices that increase student performance: identifying similarities and differences, taking notes and summarization, feedback and reinforcement, doing homework and practice, using non-linguistic representations, cooperative learning, and questioning. Downey et al. (2009) pointed out several effective instructional practices that increase student engagement such as efficient classroom routines, effective questioning techniques, inquiry, problem solving, creative thinking, and self-expression through journal writing.

Another best practice strategy identified in the research is the use of journals and artistic representation, which allows students to demonstrate abilities in a different format than pen and pencil activities and assessments. Providing students with authentic experiences that promote learning is a strategy that is consistently found throughout the

research (Downey et al., 2009). An authentic experience motivates students to learn and promotes problems solving skills that may be applied to the real world setting (Zemelman et al., 2005).

Students should be provided with appropriate resources and materials in order to take advantage of the learning process. Authentic experiences can be enhanced using supplementary resources and materials. The key is to move away from textbook learning and create avenues for alternate learning styles. This strategy allows students to make meaningful connections to learning that will persist long after the implementation of the high-stakes assessments they are subjected to (Zemelman et al., 2005; Downey et al., 2009).

One of the identified best practices that connected to authentic experiences is the practice of integrative units. Instruction centering around one concept or idea and that connects all content area allows students to see connections. The real world does not function in a content-specific format as traditional education has functioned. Ultimately, the challenge is to create student-centered learning (Zemelman et al., 2005).

In curriculum development, it is important to note that the goal is student learning and that the focuses of our curriculum planning are the standards and not the standardized tests. It is noted that the most effective way to ensure student learning is through thematic instruction that strives to integrate all content areas in order to have students make important connections. Students and educators need to tap into the prior knowledge and build on that knowledge to ensure success (Zemelman et al., 2005).

It is clear that in this era of accountability, school systems must maintain a focus and have a concerted effort to improve teaching and learning (Elmore, 2000; 2001). If not for accountability mandates, many children will be left behind. Emergent literature tells the story of successful accountability systems in New York, North Carolina, and Texas (Perreault & Lunenburg, 2002). Accountability systems call for changes in instruction to improve student learning. In doing so, accountability systems help ensure that more children will learn. Achievement data from Texas indicate that students have made progress due to the strong accountability system in place in that state. Gains were evident in the state's standardized testing program as well as on the NAEP test. Even though Texas exhibits varying student demographics, gains in achievement tests are evident. Substantial gains are evident in population groups among African Americans, Hispanics, and economically disadvantaged groups.

### Summary

The current accountability system is based on standardized assessments developed to measure student performance. While this may seem a beneficial and benign initiative, this accountability system has affected various factors of the educational system in negative ways. The public scrutiny associated with performance ratings has increased the pressure for both educators and students to succeed on assessments. This pressure to succeed has shown to be detrimental to student achievement by creating negative effects on teaching and learning, which is clearly not in the best interest of our students (Nichols & Berliner, 2007).



One of the components of education that has been impacted by high-stakes testing is student achievement. As previously stated, pressures to succeed on tests have created a situation in which educators are narrowing the curriculum to focus only on tested material. The focus has clearly shifted from student achievement in overall learning to student achievement on the test (Downey, 2003). Learning for real-life application and practice has been replaced by test-taking strategies needed to pass the high-stakes exam (Anderson, 2001; Gordon, 2000). However, assessment is not the only thing that affects students academically. By narrowing the curriculum, education is not addressing the culturally diverse needs of our students, thus causing marginalization leading to increased dropouts. It is evident that while assessments claim to measure student mastery of skills, there is little indication that appropriate instruction is taking place (Valenzuela, 1999).

Accountability and high stakes testing affects student outcomes to some degree. Research by Carnoy and Loeb (2002) examined the relationship between various states' accountability systems and student performance. Of particular interest to the researchers was how student groups performed. Their data showed a correlation between the strength of the states' accountability system and student outcomes. In addition, the data showed differences between states with comparable accountability systems. This indicates that student outcomes can be attributed to other variables in addition to accountability.

The framework for education in terms of curriculum has also been affected by high-stakes testing. Curriculum has taken a backseat to test taking strategies. Curriculum

has been reduced to a limited form of assessment where teachers and students are restricted in terms of creativity. This in turn results in students being unable to demonstrate mastery of concepts skills and objectives in any other format that is not the high-stakes assessment. In addition, the narrow focus on tested content areas has virtually eliminated the teaching and learning in other content areas (Popham, 2008).

Students are being limited in their learning opportunities due to the emphasis on passing the test. Quality of instruction is overlooked when this occurs. It has also been noted that while an emphasis on “drill and kill” may result in passing scores, it does not indicate student learning. True academic progress may not be effectively determined. Important opportunities for meaningful learning in which students can make long lasting connections are hindered (Sergiovanni & Starratt, 1998).

In order to improve education the role of the instructional leader is very important. Instructional leaders need to focus on de-emphasizing the pressures associated with high-stakes testing and advocate alternative forms of assessments in which students can demonstrate their academic abilities (Chapman, 2007). It has been noted that leadership that focuses on instruction and learning leads to positive results not only on assessment, but also in overall student academic growth and success. As a change agent, instructional leaders are responsible for setting the expectation for student success and providing the necessary support. This support can be via the provision of resources and material, professional development, and most especially the use of data to drive instruction. Appropriate planning and curriculum design based on data, in

conjunction with effective school leadership will lead to student achievement (Perreault & Lunenburg, 2002).

When planning for effective instruction, leaders in education need to take into account instructional best practices. Instructional best practices include strategies and methodology that focuses on the content to be taught and not the content to be tested. Practices that would achieve student success include but are not limited to collaborative learning, problem-solving skills, and the establishment of a curriculum that challenges students. Using best practices to guide curriculum and instruction allows teachers and students to implement and obtain authentic learning experiences (Cotton, 1989; Cotton 1999; Zemelman et al., 2005; Berliner, 2007; Downey et al., 2009).

Accountability is a necessary aspect of the education system. However, educational leaders have the responsibility to reflect on their approaches and attitudes toward high-stakes testing in relation to instruction. Proponents of accountability claim that it is working. Accountability ensures that all students will learn including minority groups (Skrla, Scheurich, & Johnson, 2001). Without accountability, “prejudice and low expectations could invisibly undermine minority achievement,” and children could be “quietly” tracked out of college-preparatory courses and put into other courses with less academic rigor (Taylor, 2000, p. 56). Accountability places the spotlight on schools to improve student achievement while at the same provides the mechanisms for progress (Perreault & Lunenburg, 2002).

Accountability systems have been research extensively. Texas has had a system of accountability for over two decades. Results from the Texas Assessment of Academic Skills

(TAAS) revealed significant gains in minority groups from 1994 to 2000. Disparities are still evident due to lower socio economic status of students, accessing to instructional resources, and lower expectations of minority students (Fuller & Johnson, 2001).

### CHAPTER III

### METHODOLOGY

#### Population

The survey population for this study included 92 high school principals from 37 school districts selected from Region I of the Texas Education Service Center and 42 school districts selected from Region XX of the Texas Education Service Center. Figure 3.1 shows the boundaries between Regions I and XX.



FIGURE 3.1. Map of the Regional Education Service Centers (ESCs) in Texas.

Charter schools, private schools and alternative education schools were not considered for the purposes of this research study. There are 67 public high schools remaining in Education Service Center Region I and 60 public high schools remaining in Education Service Center Region XX, as listed in the Texas Education Agency's 2007-2008 School Directory. Responses from campus administrators of the listed 127 public high schools in the Education Service Center Regions I and XX comprised the population. Regions I and XX were selected based on similar student demographics as reported on the 2007-2008 Academic Excellence Indicator System (AEIS) of the Texas Education Agency (TEA, 2008). Therefore, the selected high schools represent a purposeful sampling (Patton, 2002). The following tables (3.1, 3.2, 3.3, and 3.4) show the demographics and student program participation of Region 1 and Region 20 and compare student enrollment and demographics. Region I shows a greater student population percentage of at risk students, economically disadvantaged students, English language learners, immigrant students, and migrant students when compared to Region XX. Region I also shows greater program participation in bilingual education, and English as a Second Language when compared to Region XX.

TABLE 3.1. Region 1 Percent Enrollment by Student Population and Program

## Participation by School Year

		2005-06	2006-07	2007-08
<b>Student Population</b>	At Risk	67.8%	67.5%	67.1%
	Economically Disadvantaged	85.4%	85.0%	85.2%
	English Language Learner	39.7%	38.6%	39.0%
	Immigrant	4.7%	4.5%	4.1%
	Migrant	7.1%	5.6%	5.2%
<b>Program Participation</b>	Bilingual Education	27.4%	27.0%	27.4%
	Career & Technical Ed	21.5%	21.7%	21.9%
	English as a Second Language	10.2%	9.7%	9.9%
	Gifted & Talented	8.0%	8.0%	8.1%
	Special Education	9.9%	9.4%	8.8%

TABLE 3.2. Region 1 Percent Enrolled by Ethnicity or Gender and School Year

		2005-06	2006-07	2007-08
<b>Ethnicity</b>	African American	0.2%	0.2%	0.2%
	Asian/Pacific Islander	0.5%	0.5%	0.5%
	Hispanic	96.6%	96.8%	96.9%
	Native American	0.0%	0.0%	0.0%
	White	2.7%	2.5%	2.3%
	Total	100.0%	100.0%	100.0%
<b>Gender</b>	Female	48.8%	48.8%	48.8%
	Male	51.2%	51.2%	51.2%
	Total	100.0%	100.0%	100.0%

TABLE 3.3. Region 20 Percent Enrollment by Student Population and Program

## Participation by School Year

		2005-06	2006-07	2007-08
<b>Student Population</b>	At Risk	52.0%	51.1%	51.0%
	Economically Disadvantaged	63.0%	62.2%	61.3%
	English Language Learner	10.3%	10.4%	10.6%
	Immigrant	1.5%	1.4%	1.3%
	Migrant	1.2%	1.0%	0.8%
<b>Program Participation</b>	Bilingual Education	6.3%	6.4%	6.4%
	Career & Technical Ed	20.9%	20.9%	21.0%
	English as a Second Language	2.7%	2.8%	3.1%
	Gifted & Talented	6.9%	6.9%	7.0%
	Special Education	12.4%	11.9%	11.4%

TABLE 3.4. Region 20 Percent Enrolled by Ethnicity or Gender and School Year

		2005-06	2006-07	2007-08
<b>Ethnicity</b>	African American	7.6%	7.6%	7.5%
	Asian/Pacific Islander	1.6%	1.7%	1.8%
	Hispanic	66.4%	66.9%	67.6%
	Native American	0.3%	0.3%	0.3%
	White	24.2%	23.6%	22.9%
	Total	100.0%	100.0%	100.0%
<b>Gender</b>	Female	48.6%	48.6%	48.6%
	Male	51.4%	51.4%	51.4%
	Total	100.0%	100.0%	100.0%

## Instrumentation

The survey instrument consisted of a principal demographic information section and a section to document the degree to which high school principals perceive the impact of high stakes accountability on instructional practices based on a Likert Scale. The survey instrument used was developed for a research study completed by Vogler



(2000). The purpose of this study was to determine what impact, if any, the release of the Massachusetts Comprehensive Assessment System (MCAS) test results had on instructional practices as perceived by classroom teachers. In addition, the survey instrument was originally utilized in Laura Clifford's 1995 study. Clifford's study utilized instructional practices that were encouraged by the Kentucky Education Reform Act (KERA). The Clifford instrument focused on traditional teaching practices such as textbook-based assignments and lecturing, while incorporating higher order teaching practices such as open-ended questions and cooperative learning. Another study by Vogler (2002) used an adaptation of the survey instrument. The survey was utilized once more by Signorino in his 2007 study. All of these studies involved classroom teachers as participants in their study.

The instrument for this research study required minimal adjustments to reference the Texas Assessment of Knowledge and Skills (TAKS) and No Child Left Behind (NCLB). Additionally, the instructional practice items on this survey reflected current practices as mandated by Texas Essential Knowledge and Skills (TEKS). Furthermore, the participants of this study were high school principals. Clifford's survey instrument referenced teachers in the survey (1995). For this study, the reference to teacher was changed to principal. Participants were also asked to give additional demographic data.

The survey instrument was divided into three parts. Part I covered Instructional Practices, Part II was Influence Factors, and Part III contained Demographic Information. The survey questions for Part I were divided into three categories: instructional strategies, teaching techniques, and instructional materials and tools. In Part

I of the survey, items were divided into three sections: (1) instructional strategies (1-20); (2) teaching techniques (21-27); and (3) instructional materials and tools (28-40). A Likert-type scale was used, with responses designated “LD” for a large decrease, “D” for a decrease, “S” for same, “I” for increase, “LI” for a large increase, and “NA” for not applicable. For survey analysis, the following point system was used. Responses for “LD” for a large decrease were given the value of “1.” Responses for “D” for a decrease were given a value of “2.” Responses for “S” for the same were given a value of “3.” Responses for “I” were given a value of “4.” Responses for “LI” were given a value of “5.” Responses of “NA” for not applicable were given a value of “0.”

In Part II of the survey, principals were asked to indicate what had influenced changes in their school’s instructional practices since the implementation of TAKS and NCLB. For Part II a Likert-type scale was used, with responses designated “SD” for strongly disagree, “D” for disagree, “U” for undecided, “A” for agree, and “SA” for strongly agree. For survey analysis, the following point system was used. Responses for “SD” strongly disagree were given a value of “1.” Responses for “D” disagree were given a value of “2.” Responses for “U” undecided were given a value of “3.” Responses for “A” agree were given a value of “4.” Responses for “SA” strongly agree were given a value of “5.” In Part III, principals were asked demographic information, which included the following: gender, years of classroom teaching experience, years of experience as an administrator, whether or not the participant was a principal prior to the implementation of TAKS and or NCLB, years of experience as a campus principal,

campus AYP status, AEIS campus rating, and location (Educational Service Center Region I or Region XX).

### Data Collection Procedures

An online survey was disseminated to each potential respondent. A listing of all high school principals in Regions I and XX was developed from the Texas Education Agency's 2007-2008 School Directory. This list was imported into an Excel spreadsheet and sorted according to specific criteria to exclude charter schools, private schools, and alternative education schools. This listing was imported into an online survey system (Survey Monkey). Each identified participant electronically received a cover letter assuring subject confidentiality and instructions for the completion of the online survey. The electronic request sent to each participant included a link to the online survey. (See Appendix B.)

The initial invitation to all potential principals was sent on September 17, 2008. A second invitation to potential principals was sent on September 29, 2008. The last invitation to potential principals was sent on October 20, 2009. The researcher had access to the data via the online survey web host. The total number of possible principals for this study was 127. The researcher collected 92 completed surveys, or 72% of the sample. The online survey system was able to manage the data and allowed the researcher to download responses onto an Excel spreadsheet. This spreadsheet containing the participant responses was uploaded onto SPSS 13.0.

### Reliability and Validity

The survey instrument that was used for this research study is an adapted version of a survey instrument used by Vogler (2000), who used the survey for his dissertation entitled, *The Impact of High-Stakes, State-Mandated Student Performance Assessment on 10th Grade English, Mathematics, and Science Teachers' Instructional Practices*. The instrument for this research study required minimal adjustments. References were made to the Texas Assessment of Knowledge and Skills (TAKS) and No Child Left Behind (NCLB). Furthermore, the participants of this study were high school principals. Therefore, a change was made to reference principals rather than teachers (See Appendix A). Changes that were deemed necessary were done by the researcher and the survey instrument was refined to meet the canons of rational and construct validity (Thorndike & Hagin, 1969).

### Data Analysis

The survey instrument was divided into three parts. Part I covered Instructional Practices, Part II was Influence Factors, and Part III contained Demographic Information. In Part I of the survey items were divided into three sections: (1) instructional strategies; (2) teaching techniques; and (3) instructional materials and tools. The results of the study were reported using appropriate quantitative statistics as delineated by Spatz (2005) and analyzed using the Statistical Package for the Social Sciences (SPSS) program 13.0. The researcher used analysis of variance, post hoc analysis (Tukey HSD), mean scores, standard deviations, frequencies, and correlation.

Analyzed data from Part I of the survey determined which instructional practices had decreased or increased since the implementation of No Child Left Behind (NCLB) and the Texas Assessment of Knowledge and Skills (TAKS). Analyzed data from Part II of the survey, factors influencing instructional practices, determined which factors influenced principals changing their instructional practices since the implementation of No Child Left Behind (NCLB) and the Texas Assessment of Knowledge and Skills (TAKS).

The analyses were conducted by descriptive analysis, frequencies, percentages, and analysis of variance for Part I and Part II of the survey. The results of Part I and Part II of the survey were also analyzed using analysis of variance and post hoc (Tukey HSD) to determine the existence of significance ( $p < .05$ ) from the results from Part III (demographic information). Since many levels of data coming from Part III of the survey were available, a post hoc analysis (Tukey HSD) was used to determine where exactly significance was found. The analysis of the demographic information constituted an exploratory examination of the data. Demographic information used for the analysis included: gender, years of classroom teaching experience, years of experience as an administrator, as a principal prior to the implementation of TAKS and or NCLB, years of experience as a campus principal, AYP status, AEIS campus rating, and location (Educational Service Center Regions I or XX).

## CHAPTER IV

### ANALYSIS OF THE DATA

#### Research Questions

This quantitative study was guided by the following research questions.

*Research Question 1:* What are the perceptions of high school principals regarding the impact of high-stakes accountability on instructional practices?

*Research Question 2:* Based on campus, state, and federal academic performance ratings, what are the differences in perceptions between high school principals regarding the impact of a high-stakes accountability system on instructional practices?

*Research Question 3:* What are the differences in perceptions regarding the impact of a high-stakes accountability system among principals based upon gender, years of classroom teaching experience, years of experience as an administrator, years of experience as a principal prior to the implementation of TAKS and or NCLB, years of experience as a campus principal, and location by Educational Service Center (Regions I and XX)?

*Research Question 4.:* What factors are currently influencing changes to instructional practices?

### Results of the Study

The survey population for this study included 92 high school principals from 37 school districts selected from Region I of the Texas Education Service Center and 42 school districts selected from Region XX of the Texas Education Service Center. Charter schools, private schools and alternative education schools were not considered for the purposes of this research study. The remaining 67 public high schools in Region I and 60 public high schools in Region XX listed in the Texas Education Agency's 2007-2008 School Directory were selected for this study. Responses from campus administrators of the listed 127 public high schools from Education Service Center Regions I and XX comprised the population for the study.

Ninety-two subjects participated in this study (N=92). All were high school principals in either Region I or Region XX. They included 40 high school principals from Region I and 52 high school principals from Region XX. The participants were asked to document the degree to which they perceive the impact of high stakes accountability on instructional practices and the factors that may be influencing to make changes to instructional practices based on a Likert Scale. Instructional practices include teaching strategies, teaching techniques, and teaching tools that guide interaction and learning in the classroom. A few examples are writing assignments, group projects, discussion groups, worksheets, lecturing, cooperative learning, modeling, textbooks, magazines, lab equipment, computers, and manipulatives.

## Part I Instructional Practices

The survey questions for Part I were divided into three categories: instructional strategies, teaching techniques, and instructional materials and tools. Responses to survey questions were analyzed using the SPSS statistical program version 13.0. (See Appendix C, for Descriptive Statistics derived from the survey instrument.) For the first category of the survey, principals were asked to indicate if they perceived that the use of a specific practice had increased or decreased since the implementation of No Child Left Behind (NCLB) and the Texas Assessment of Knowledge and Skills (TAKS). In Part II of the survey, principals were asked to indicate what had influenced changes in their school's instructional practices since the implementation of NCLB and TAKS. Demographic information was collected from principals in Part III.

A descriptive analysis was performed for Part I of the survey. The results are presented in Table 4.1; every question is presented with its mode, median, and standard deviation. In Part I of the survey, items were divided into three sections: (1) instructional strategies (1-20); (2) teaching techniques (21-27); and (3) instructional materials and tools (28-40). A Likert-type scale was used, with responses shown as "LD" for a large decrease, "D" for a decrease, "S" for same, "I" for increase, "LI" for large increase, and "NA" for not applicable. For survey analysis, the following point system was used. Responses for "LD" for a large decrease were given the value of "1." Responses for "D" for a decrease were given a value of "2." Responses for "S" for the same were given a value of "3." Responses for "I" for increase were given a value of "4." Responses for



“LI” for large increase were given a value of “5.” Responses of “NA” for not applicable were given a value of “0.” Detailed results are found in Appendix C.

TABLE 4.1. Part I Results of Descriptive Analysis of Data

<b>Question</b>	<b>Mean</b>	<b>Mode</b>	<b>Standard Deviation</b>
1. Writing Assignments	4.1304	4	0.80134
2. Group Projects	3.6087	4	0.94876
3. Textbook-Based Assignments	2.3696	3	0.72198
4. Discussion Groups	3.7391	4	0.86278
5. Multiple-Choice Questions	3.4891	3	1.06384
6. Open Response Questions	4.1413	4	0.81983
7. True-False Questions	2.6196	3	0.67681
8. Use of Manipulative	3.9565	4	0.83749
9. Inquiry/Investigation	3.9891	4	0.71858
10. Problem-Solving Activities	4.3804	5	0.73891
11. Worksheets	2.75	3	0.87235
12. Lesson Based on Current Events	3.75	4	0.76496
13. Project-Based Assignments	3.587	4	0.82744
14. Creative/Critical Thinking Questions	4.0326	4	0.89505
15. Role Playing	3.3187	3	0.53498
16. Use of Charts, Webs, and/or Outlines	3.9457	4	0.6353
17. Use of Response Journals	3.7253	4	0.8572
18. Use of Portfolios	3.4783	3	0.97753
19. Use of Rubrics or Scoring Guides	3.9457	4	0.6353
20. Use of Exhibitions	3.3152	3	0.79738
21. Interdisciplinary Instruction	3.7609	4	0.84346
22. Lecturing	2.25	2	0.58601
23. Modeling	3.3626	3	0.7229
24. Cooperative Learning/Group Work	3.3261	3	0.91518
25. Collaborative/Team-Teaching	3.6264	4	0.70943
26. Peer or Cross-Age Tutoring	3.8261	4	0.67301
27. Facilitating/Coaching	3.6957	4	0.52913
28. Textbooks	2.6304	3	0.67478
29. Reference Books	3.163	3	0.81574
30. Supplementary Books	3.6413	4	0.68871
31. Primary Source Material	3.2169	3	0.78162
32. Newspaper/Magazines	3.3152	4	0.90091
33. Audiovisual Materials	3.6196	3	0.78225
34. Lab Equipment	4.2198	4	0.69606
35. Calculators	4.3626	5	0.75302
36. Computers/Educational Software	4.5714	5	0.80475
37. Computers/Internet and/or On-Line Research Service	4.2556	5	0.89394
38. Manipulatives	4.1099	4	0.88758
39. Maps/Globes/Atlases	3.3956	4	0.69728
40. Visual Aids (e.g. posters, graphs)	3.6923	4	0.77017

Table 4.2 indicates the results for frequencies and percentages for Part I of the survey. The table shows the frequencies followed by percentages in parentheses for instructional strategies, teaching techniques, and instructional materials and tools. A Likert-type scale was used, with responses shown as “LD” for a large decrease, “D” for a decrease, “S” for same, “I” for large increase, and “NA” for not applicable. Detailed results are found in Appendix D.

TABLE 4.2. Survey Results by the number of Responses for Part I

<b>Instructional Strategies</b>	<b>LD</b>	<b>D</b>	<b>S</b>	<b>I</b>	<b>LI</b>	<b>NA</b>
1. Writing Assignments	1(1)	2(2)	12(13)	46(50)	31(34)	
2. Group Projects	0(0)	14(15)	24(26)	38(41)	16(17)	
3. Textbook-Based Assignments	11(12)	38(41)	41(45)	2(2)	0(0)	
4. Discussion Groups	1(1)	6(6.5)	25(27)	44(48)	16(17)	
5. Multiple-Choice Questions	0(0)	19(21)	30(33)	22(24)	21(23)	
6. Open Response Questions	1(1)	2(2)	13(14)	43(47)	33(36)	
7. True-False Questions	2(2)	39(42)	43(47)	8(9)	0(0)	
8. Use of Manipulative	1(1)	1(1)	25(27)	39(42)	26(28)	
9. Inquiry/Investigation	1(1)	2(2)	12(13)	59(64)	18(20)	
10. Problem-Solving Activities	1(1)	2(2)	2(2)	43(47)	44(48)	
11. Worksheets	2(2)	37(40)	41(45)	6(7)	6(7)	
12. Lesson Based on Current Events	0(0)	5(5)	26(28)	48(52)	13(14)	
13. Project-Based Assignments	5(5)	2(2)	22(24)	60(65)	3(3)	
14. Creative/Critical Thinking Questions	2(2)	6(7)	5(5)	53(58)	26(28)	
15. Role Playing	0(0)	2(2)	59(64)	29(32)	1(1)	
16. Use of Charts, Webs, and/or Outlines	1(1)	4(4)	3(3)	75(82)	9(10)	
17. Use of Response Journals	0(0)	4(4)	25(27)	50(54)	12(13)	
18. Use of Portfolios	5(5)	3(3)	40(44)	32(33)	11(12)	
19. Use of Rubrics or Scoring Guides	1(1)	0(0)	15(16)	63(69)	13(14)	
20. Use of Exhibitions, Guest Speakers, Community Agencies	5(5)	2(2)	46(50)	37(40)	2(2)	
<b>Teaching Techniques</b>	<b>LD</b>	<b>D</b>	<b>S</b>	<b>I</b>	<b>LI</b>	<b>NA</b>
21. Interdisciplinary Instruction	4(4)	0(0)	22(24)	54(59)	12(13)	
22. Lecturing	3(3)	67(73)	18(20)	4(4)	0(0)	
23. Modeling	1(1)	7(8)	44(48)	36(39)	3(3)	
24. Cooperative Learning/Group Work	1(1)	16(17)	36(39)	30(33)	9(10)	
25. Collaborative/Team-Teaching	1(1)	5(5)	25(27)	56(61)	4(4)	
26. Peer or Cross-Age Tutoring	0(0)	1(1)	26(28)	54(59)	10(11)	1(1)
27. Facilitating/Coaching	0(0)	0(0)	31(34)	58(63)	3(3)	

TABLE 4.2. Continued.

<b>Instructional Materials and Tools</b>	<b>LD</b>	<b>D</b>	<b>S</b>	<b>I</b>	<b>LI</b>	<b>NA</b>
28. Textbooks	4(4)	32(35)	50(54)	6(7)	0(0)	
29. Reference Books	4(4)	10(11)	47(51)	29(32)	2(2)	
30. Supplementary Books	1(1)	1(1)	35(38)	48(52)	7(8)	
31. Primary Source Material	13(14)	44(48)	21(23)	5(5)	83(90)	
32. Newspaper/Magazines	5(5)	11(12)	27(29)	48(52)	1(1)	
33. Audiovisual Materials	1(1)	0(0)	46(50)	31(34)	14(15)	
34. Lab Equipment	1(1)	0(0)	8(9)	51(55)	31(34)	
35. Calculators	1(1)	0(0)	9(10)	36(39)	45(49)	
36. Computers/Educational Software	1(1)	0(0)	4(4)	23(25)	63(69)	
37. Computers/Internet and/or On-Line Research Service	1(1)	4(4)	9(10)	33(36)	43(47)	
38. Manipulatives	1(1)	5(5)	10(11)	42(46)	33(36)	
39. Maps/Globes/Atlases	1(1)	7(8)	39(43)	43(47)	1(1)	
40. Visual Aids (e.g. posters, graphs)	1(1)	4(4)	27(29)	49(53)	10(11)	

Notes: LD=Large Decrease D= Decrease S=Same I=Increase LI=Large Increase NA=Not applicable  
Percentages were rounded up to the nearest percent

Table 4.3 shows that the mean ranged from 4.38 to 3.32, indicating an increase to seventeen instructional strategies. Question number and items are arranged from the greatest mean to the least mean. Responses to four items on the survey had a mean over four. These items include problem-solving activities, open response questions, writing assignments, and creative/critical thinking questions. A great majority of principals indicated a perceived increase in the use of four instructional strategies. For the use of problem-solving activities, the principals indicated a total increase of 94.5%. For the use of open response questions, the principals indicated a total increase of 82.6%. For the use of writing assignments, principals indicated a total increase of 83.7%. For the use of creative/critical thinking questions, principals indicated a total increase of 85.9%.

TABLE 4.3. Increased Instructional Strategies

<b>Question # and Item</b>	<b>Mean</b>	<b>Total % Increase</b>	<b>% Same</b>
10. Problem-Solving Activities	4.38	94.5	2.2
6. Open Response Questions	4.14	82.6	14.1
1. Writing Assignments	4.13	83.7	13.0
14. Creative/Critical Thinking Questions	4.03	85.9	57.6
9. Inquiry/Investigation	3.99	83.7	13.0
8. Use of Manipulative	3.96	70.7	27.2
16. Use of Charts, Webs, and/or Outlines	3.95	91.3	3.3
19. Use of Rubrics or Scoring Guides	3.95	82.6	16.3
12. Lesson Based on Current Events	3.75	66.3	28.3
4. Discussion Groups	3.74	65.2	27.2
17. Use of Response Journals	3.73	67.3	27.2
2. Group Projects	3.61	58.7	26.1
13. Project-Based Assignments	3.59	68.5	23.9
5. Multiple-Choice Questions	3.49	46.7	32.6
18. Use of Portfolios	3.48	46.8	43.5
15. Role Playing	3.32	32.6	64.1
20. Use of Guest Speakers	3.32	42.4	50.0

Table 4.4 shows that the mean ranged from 2.75 to 2.37, which indicates a perceived decrease in the use of three instructional strategies. Question number and items are arranged from the greatest mean to the least mean. Responses to three items on the survey had a mean less than 3, which indicates a perceived decrease in the use of worksheets; principals indicated a total decrease of 42.4%. For the use of true-false questions, principals indicated a total perceived decrease of 44.6%. For the use of textbook-based assignments, principals indicated a total perceived decrease of 53.3%.

TABLE 4.4. Decreased Instructional Strategies

<b>Question # and Item</b>	<b>Mean</b>	<b>Total % Decrease</b>	<b>% Same</b>
11. Worksheets	2.75	42.4	44.6
7. True-False Questions	2.62	44.6	46.7
3. Textbook-Based Assignments	2.37	53.3	44.6

Table 4.5 shows that the mean ranged from 3.83 to 3.33, indicating a perceived increase to six teaching techniques. Question number and items are arranged from the greatest mean to the least mean. These items include peer or cross-age tutoring, interdisciplinary instruction, facilitating/coaching, collaborative/team-teaching, modeling, and cooperative learning/group work. Large total perceived increases are indicated for four items. For peer or cross-age tutoring, principals indicated a 69.6% total increase while 28.3% stayed the same. For interdisciplinary instruction, principals indicated a 71.7% total increase while 23.9% stayed the same. For facilitating/coaching, principals indicated a 66.3% total perceived increase while 33.7% stayed the same. For collaborative/team-teaching, principals indicated a 65.2 total perceived increase while 27.2% stayed the same.

TABLE 4.5. Increased Teaching Techniques

<b>Question # and Item</b>	<b>Mean</b>	<b>Total % Increase</b>	<b>% Same</b>
26. Peer or Cross-Age Tutoring	3.83	69.6	28.3
21. Interdisciplinary Instruction	3.76	71.7	23.9
27. Facilitating/Coaching	3.70	66.3	33.7
25. Collaborative/Team-Teaching	3.63	65.2	27.2
23. Modeling	3.36	42.9	47.8
24. Cooperative Learning/Group Work	3.33	42.4	39.1

Table 4.6 shows that only one teaching technique has decreased. The mean was 2.25, indicating a perceived decrease. For lecturing, principals indicated a 76.1% total decrease while 19.6% stayed the same.

TABLE 4.6. Decreased Teaching Techniques

Question # and Item	Mean	Total % Decrease	% Same
22. Lecturing	2.25	76.1	19.6

Table 4.7 shows that the mean ranged from 4.57 to 3.16, indicating an increase to twelve instructional materials and tools. Question number and items are arranged from the greatest mean to the least mean. Responses to five items on the survey had a mean over four. These items include computers/educational software, calculators, computers/internet and/or on-line research service, lab equipment, and manipulatives. A great majority of principals indicated a perceived increase to the above five instructional materials and tools. For computers/educational software, principals indicated a 94.5% total increase while 0.0% stayed the same. For calculators, principals indicated an 89.1% total increase while 9.9% stayed the same. For computers/internet and/or on-line research service, principals indicated an 84.5% total increase while 9.8% stayed the same. For lab equipment, principals indicated a 90.1% total increase while 8.8% stayed the same. For manipulatives, principals indicated an 82.5% total increase while 10.9% stayed the same.

TABLE 4.7. Increased Instructional Materials and Tools

<b>Question # and Item</b>	<b>Mean</b>	<b>Total % Increase</b>	<b>% Same</b>
36. Computers/Educational Software	4.57	94.5	0
35. Calculators	4.36	89.1	9.9
37. Computers/Internet and/or On-Line Research Service	4.26	84.5	9.8
34. Lab Equipment	4.22	90.1	8.8
38. Manipulatives	4.11	82.5	10.9
40. Visual Aids (e.g. posters, graphs)	3.69	64.8	29.7
30. Supplementary Books	3.64	59.8	38.0
33. Audiovisual Materials	3.62	48.9	50.0
39. Maps/Globes/Atlases	3.40	48.4	42.4
32. Newspaper/Magazines	3.32	53.3	29.3
31. Primary Source Material	3.22	31.3	53.0
29. Reference Material	3.16	33.7	51.1

Table 4.8 shows that the use of textbooks has decreased as an instructional material and tool. The mean was 2.63, indicating a decrease. Principals indicated a 39.1% total perceived decrease while 54.3 % stayed the same.

TABLE 4.8. Decreased Instructional Materials and Tools

<b>Question # and Item</b>	<b>Mean</b>	<b>Total % Decrease</b>	<b>% Same</b>
28. Textbooks	2.63	39.1	54.3

In review, the analysis of frequencies for instructional practices principals indicated the highest perceived increase in the use of the following instructional strategies: (1) problem-solving activities; (2) open response questions; (3) writing assignments; (4) creative/critical thinking questions; (5) inquiry/investigation; (6) use of manipulatives, use of charts, webs, and/or outlines; (7) use of rubrics or scoring guides;

(8) lesson based on current events; (9) discussion groups; (10) use of response journals; (11) group projects; (12) project-based assignments; (13) peer or cross-age tutoring; (14) interdisciplinary instruction; (15) facilitating/coaching; (16) collaborative/team-teaching; (17) computers/educational software; (18) calculators; (19) computers/internet and/or on-line research service; (20) lab equipment; (21) manipulatives; (22) visual aids (e.g. posters, graphs), and (23) supplementary books.

Principals indicated a perceived decrease in the use of worksheets, true-false questions, textbook-based assignments, and lecturing. Principals also indicated a few instructional strategies remained the same. The highest responses of “same” were creative/critical thinking questions, use of guest speakers, role-playing, audiovisual materials, primary source material, reference material, and textbooks.

For additional information, the results of the survey were also analyzed according to demographic information. These items included gender, years of classroom teaching experience, years of experience as an administrator, years of experience as a principal prior to the implementation of TAKS and or NCLB, years of experience as a campus principal, AYP status, AEIS campus rating, and location by Educational Service Center (Regions I and XX). The analyses were conducted by using the Analysis of Variance (ANOVA) and post hoc analysis (Tukey HSD) in the SPSS computer statistic program, version 13.0. The results are illustrated in the following tables.

Table 4.9 shows significant differences between male (n=55) and female (n=37) principals in reference to question 19 under instructional strategies, regarding the use of rubrics. Males indicated more of a perceived increase with a mean of 4.05 while females



indicated a mean of 3.78. Another significant difference between male and female principals was shown in reference to question 37 on the use of instructional materials and tools. Males indicated more of an increase with a mean of 4.40 while females indicated a mean of 4.02.

TABLE 4.9. Significant Survey Items by Gender

<b>Instructional Strategies</b>		Sum of Squares	df	Mean Square	F	Sig.
19. Rubrics	Between Groups	1.622	1	1.622	4.157	.044
	Within Groups	35.107	90	.390		
	Total	36.728	91			
<b>Instructional Materials and Tools</b>		Sum of Squares	df	Mean Square	F	Sig.
37. Internet Resources	Between Groups	3.113	1	3.113	4.028	.048
	Within Groups	68.009	88	.773		
	Total	71.122	89			

Table 4.10 shows significant differences using the post hoc analysis (Tukey HSD) among principals with varying years of teaching experience for question 25 on teaching techniques. Data indicates that principals with 6 to 10 years teaching experience had a higher perceived increase in the use of collaborative teaching a teaching technique when compared to other principals with 11 to 15 years of experience.

TABLE 4.10. Significant Survey Items by Classroom Teaching Experience

<i>Dependent Variable</i>	<i>(I) Teach Exp</i>	<i>(J) Teach Exp</i>	<i>Mean Diff. (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
<b>Collaborative Teaching #25</b>	<b>0-5 Yrs</b>	<b>6-10 Yrs</b>	-.66429	.34275	.387
		<b>11-15 Yrs</b>	.11957	.35180	.999
		<b>16-20 Yrs</b>	-.47222	.35897	.776
		<b>21-25 Yrs</b>	-.55000	.43563	.804
		<b>26 Plus Yrs</b>	-.41667	.41918	.919
	<b>6-10 Yrs</b>	<b>0-5 Yrs</b>	.66429	.34275	.387
		<b>11-15 Yrs</b>	.78385(*)	.17431	.000
		<b>16-20 Yrs</b>	.19206	.18836	.910
		<b>21-25 Yrs</b>	.11429	.31047	.999
		<b>26 Plus Yrs</b>	.24762	.28694	.954
	<b>11-15 Yrs</b>	<b>0-5 Yrs</b>	-.11957	.35180	.999
		<b>6-10 Yrs</b>	-.78385(*)	.17431	.000
		<b>16-20 Yrs</b>	-.59179	.20436	.053
		<b>21-25 Yrs</b>	-.66957	.32044	.303
		<b>26 Plus Yrs</b>	-.53623	.29769	.470
	<b>16-20 Yrs</b>	<b>0-5 Yrs</b>	.47222	.35897	.776
		<b>6-10 Yrs</b>	-.19206	.18836	.910
		<b>11-15 Yrs</b>	.59179	.20436	.053
		<b>21-25 Yrs</b>	-.07778	.32829	1.000
		<b>26 Plus Yrs</b>	.05556	.30613	1.000
	<b>21-25 Yrs</b>	<b>0-5 Yrs</b>	.55000	.43563	.804
		<b>6-10 Yrs</b>	-.11429	.31047	.999
		<b>11-15 Yrs</b>	.66957	.32044	.303
		<b>16-20 Yrs</b>	.07778	.32829	1.000
		<b>26 Plus Yrs</b>	.13333	.39323	.999
	<b>26 Plus Yrs</b>	<b>0-5 Yrs</b>	.41667	.41918	.919
		<b>6-10 Yrs</b>	-.24762	.28694	.954
		<b>11-15 Yrs</b>	.53623	.29769	.470
		<b>16-20 Yrs</b>	-.05556	.30613	1.000
		<b>21-25 Yrs</b>	-.13333	.39323	.999

Table 4.11 shows significant differences using the post hoc analysis (Tukey HSD) among principals with varying years of administrative experience for question 19 on instructional strategies, and question 36 on instructional materials and tools. Data shows that principals with 0 to 5 years of administrative experience indicated a higher perceived increase in the use of rubrics (question 19) as a teaching strategy when compared to principals with 16-20 years of administrative experience. Data shows that principals with 6 to 10 years of administrative experience indicated a higher perceived

increase in the use of computers/educational software as an instructional material/tool teaching tool when compared to principals with 16 to 20 years of administrative experience.

TABLE 4.11. Significant Survey Items by Years of Administrative Experience

<i>Dependent Variable</i>	<i>(I) adm exp</i>	<i>(J) adm exp</i>	<i>Mean Diff. (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
<b>Rubrics #19</b>	<b>0-5 Yrs</b>	<b>6-10 Yrs</b>	.25897	.14121	.450
		<b>11-15 Yrs</b>	.08824	.23922	.999
		<b>16-20 Yrs</b>	1.08824(*)	.36666	.043
		<b>21-25 Yrs</b>	-.24510	.36666	.985
		<b>26 Plus Yrs</b>	-.24510	.36666	.985
	<b>6-10 Yrs</b>	<b>0-5 Yrs</b>	-.25897	.14121	.450
		<b>11-15 Yrs</b>	-.17073	.23530	.978
		<b>16-20 Yrs</b>	.82927	.36412	.215
		<b>21-25 Yrs</b>	-.50407	.36412	.736
		<b>26 Plus Yrs</b>	-.50407	.36412	.736
	<b>11-15 Yrs</b>	<b>0-5 Yrs</b>	-.08824	.23922	.999
		<b>6-10 Yrs</b>	.17073	.23530	.978
		<b>16-20 Yrs</b>	1.00000	.41215	.159
		<b>21-25 Yrs</b>	-.33333	.41215	.965
		<b>26 Plus Yrs</b>	-.33333	.41215	.965
	<b>16-20 Yrs</b>	<b>0-5 Yrs</b>	-1.08824(*)	.36666	.043
		<b>6-10 Yrs</b>	-.82927	.36412	.215
		<b>11-15 Yrs</b>	-1.00000	.41215	.159
		<b>21-25 Yrs</b>	-1.33333	.49707	.089
		<b>26 Plus Yrs</b>	-1.33333	.49707	.089
	<b>21-25 Yrs</b>	<b>0-5 Yrs</b>	.24510	.36666	.985
		<b>6-10 Yrs</b>	.50407	.36412	.736
		<b>11-15 Yrs</b>	.33333	.41215	.965
		<b>16-20 Yrs</b>	1.33333	.49707	.089
		<b>26 Plus Yrs</b>	.00000	.49707	1.000
	<b>26 Plus Yrs</b>	<b>0-5 Yrs</b>	.24510	.36666	.985
		<b>6-10 Yrs</b>	.50407	.36412	.736
		<b>11-15 Yrs</b>	.33333	.41215	.965
		<b>16-20 Yrs</b>	1.33333	.49707	.089
		<b>21-25 Yrs</b>	.00000	.49707	1.000

TABLE 4.11. Continued.

<i>Dependent Variable</i>	<i>(I) adm exp</i>	<i>(J) adm exp</i>	<i>Mean Diff. (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
<b>Computers #36</b>	<b>0-5 Yrs</b>	<b>6-10 Yrs</b>	-.21064	.18047	.851
		<b>11-15 Yrs</b>	.42045	.30411	.737
		<b>16-20 Yrs</b>	1.21212	.46535	.107
		<b>21-25 Yrs</b>	-.12121	.46535	1.000
		<b>26 Plus Yrs</b>	-.12121	.46535	1.000
	<b>6-10 Yrs</b>	<b>0-5 Yrs</b>	.21064	.18047	.851
		<b>11-15 Yrs</b>	.63110	.29827	.289
		<b>16-20 Yrs</b>	1.42276(*)	.46155	.032
		<b>21-25 Yrs</b>	.08943	.46155	1.000
		<b>26 Plus Yrs</b>	.08943	.46155	1.000
	<b>11-15 Yrs</b>	<b>0-5 Yrs</b>	-.42045	.30411	.737
		<b>6-10 Yrs</b>	-.63110	.29827	.289
		<b>16-20 Yrs</b>	.79167	.52244	.655
		<b>21-25 Yrs</b>	-.54167	.52244	.904
		<b>26 Plus Yrs</b>	-.54167	.52244	.904
	<b>16-20 Yrs</b>	<b>0-5 Yrs</b>	-1.21212	.46535	.107
		<b>6-10 Yrs</b>	-1.42276(*)	.46155	.032
		<b>11-15 Yrs</b>	-.79167	.52244	.655
		<b>21-25 Yrs</b>	-1.33333	.63008	.289
		<b>26 Plus Yrs</b>	-1.33333	.63008	.289
	<b>21-25 Yrs</b>	<b>0-5 Yrs</b>	.12121	.46535	1.000
		<b>6-10 Yrs</b>	-.08943	.46155	1.000
		<b>11-15 Yrs</b>	.54167	.52244	.904
		<b>16-20 Yrs</b>	1.33333	.63008	.289
		<b>26 Plus Yrs</b>	.00000	.63008	1.000
	<b>26 Plus Yrs</b>	<b>0-5 Yrs</b>	.12121	.46535	1.000
		<b>6-10 Yrs</b>	-.08943	.46155	1.000
		<b>11-15 Yrs</b>	.54167	.52244	.904
		<b>16-20 Yrs</b>	1.33333	.63008	.289
		<b>21-25 Yrs</b>	.00000	.63008	1.000

Table 4.12 shows significant differences among principals who were principals prior to the implementation of TAKS and NCLB, as shown by the responses for question 22. Principals who were not principals prior to TAKS and NCLB indicated a larger perceived decrease in the use of lecturing. They also indicated more of “same” (no change) in the use of lecturing as a teaching technique.

TABLE 4.12. Significant Survey Items by Principal Prior to TAKS and or NCLB

<b>Teaching Techniques</b>		Sum of Squares	df	Mean Square	F	Sig.
<b>22. Lecturing</b>	Between Groups	1.971	1	1.971	6.059	.016
	Within Groups	29.279	90	.325		
	Total	31.250	91			
	Within Groups	43.503	89	.489		
	Total	43.604	90			

Table 4.13 shows significant differences using the post hoc analysis (Tukey HSD) among principals by years of being a principal at their current school, as shown by the responses for question 30. Principals with 0 to 5 years experience as principals at their current school indicated a higher perceived increase in the use of supplementary books as an instructional material/tool when compared to principals who had 6 to 10 years of being a principal at their current school.

TABLE 4.13. Significant Survey Items by Years of Principal at Current School

<i>Dependent Variable</i>	<i>(I) yrs prin</i>	<i>(J) yrs prin</i>	<i>Mean Diff. (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
<b>Supplementary Books #30</b>	<b>0-5 Yrs</b>	<b>6-10 Yrs</b>	.60991(*)	.18629	.004
		<b>11-15 Yrs</b>	.07658	.38746	.979
	<b>6-10 Yrs</b>	<b>0-5 Yrs</b>	-.60991(*)	.18629	.004
		<b>11-15 Yrs</b>	-.53333	.41609	.409
	<b>11-15 Yrs</b>	<b>0-5 Yrs</b>	-.07658	.38746	.979
		<b>6-10 Yrs</b>	.53333	.41609	.409

Table 4.14 shows significant differences among principals from campuses that met AYP or missed AYP for instructional strategies questions 6, 10, 11, and 16, and for teaching techniques and instructional materials and tools questions 31, 34, and 39. Data indicates that principals from campuses that missed AYP had a higher perceived increase in the use of open response questions (question 6) as an instructional strategy when compared to principals from campuses that met AYP. Data also indicates that principals from campuses that missed AYP had a higher increase in the use of problem solving (question 10) as an instructional strategy when compared to principals from campuses that met AYP. In addition, data indicates that principals from campuses that missed AYP had a higher perceived decrease in the use of worksheets (question 11) as an instructional strategy when compared to principals from campuses that met AYP. Furthermore, data indicates that principals from campuses that met AYP had a higher increase in the use of charts/webs/outlines (question 16) as an instructional strategy when compared to principals from campuses that missed AYP. Moreover, data indicates that principals from campuses that met AYP had a higher perceived increase in the use of collaborative teaching (question 25) as a teaching technique when compared to principals from campuses that missed AYP. Data again indicates that principals from campuses that missed AYP had a higher “same” (no change) in the use of primary sources (question 31) as a teaching technique when compared to principals from campuses that met AYP. Similarly, data indicates that principals from campuses that missed AYP had a higher perceived increase in the use of lab equipment (question 34) as a teaching technique when compared to principals from campuses that met AYP. Lastly,

data indicates that principals from campuses that missed AYP had a higher increase in the use of maps and globes (question 39) as an instructional tool when compared to principals from campuses that met AYP.

TABLE 4.14. Significant Survey Items by AYP Status

<b>Instructional Strategies</b>		Sum of Squares	df	Mean Square	F	Sig.
6. Open Response	Between Groups	4.401	2	2.200	3.450	.036
	Within Groups	56.762	89	.638		
	Total	61.163	91			
10. Problem Solving	Between Groups	4.865	2	2.432	4.830	.010
	Within Groups	44.820	89	.504		
	Total	49.685	91			
11. Worksheets	Between Groups	4.632	2	2.316	3.190	.046
	Within Groups	64.618	89	.726		
	Total	69.250	91			
16.Charts/Webb/Outlines	Between Groups	2.653	2	1.326	3.464	.036
	Within Groups	34.075	89	.383		
	Total	36.728	91			
<b>Teaching Techniques</b>		Sum of Squares	df	Mean Square	F	Sig.
25.Collaborative Teaching	Between Groups	3.882	2	1.941	4.124	.019
	Within Groups	41.415	88	.471		
	Total	45.297	90			
<b>Instructional Materials and Tools</b>		Sum of Squares	df	Mean Square	F	Sig.
31.Primary Sources	Between Groups	6.713	2	3.357	6.190	.003
	Within Groups	43.383	80	.542		
	Total	50.096	82			
34. Lab Equipment	Between Groups	2.982	2	1.491	3.230	.044
	Within Groups	40.622	88	.462		
	Total	43.604	90			
39. Maps/Globes	Between Groups	4.013	2	2.006	4.442	.015
	Within Groups	39.745	88	.452		
	Total	43.758	90			

Table 4.15 shows significant differences using the post hoc analysis (Tukey HSD) among principals based on AEIS campus ratings were indicated for instructional strategies questions 1, 2, 3, 4, 6, 7, 8, 10, 13, and 20. Significant differences were also indicated for teaching techniques question 25 and instructional materials and tools questions 31, 32, 34, 35, 38, and 39. Data indicates that principals from recognized campuses had a higher perceived increase in the use of writing assignments (question 1) as an instructional strategy when compared to principals from acceptable campuses. Data also indicates that principals from recognized campuses had a higher perceived increase in the use of group projects (question 2) as an instructional strategy when compared to principals from acceptable campuses. Data again indicates that principals from acceptable campuses had a higher perceived increase in the use of textbook-based assignments (question 3) as an instructional strategy when compared to principals from recognized campuses. In addition, data indicates that principals from exemplary and recognized campuses had a higher perceived increase in the use of discussion groups (question 4) as an instructional strategy when compared to principals from acceptable campuses. Furthermore, data indicates that principals from recognized campuses had a higher perceived increase in the use of open response questions (question 6) as an instructional strategy when compared to principals from acceptable campuses. Similarly, data indicates that principals from recognized campuses had a higher perceived increase in the use of true and false questions (question 7) as an instructional strategy when compared to principals from acceptable campuses.



TABLE 4.15. Significant Survey Items by AEIS Campus Rating

<i>Dependent Variable</i>	<i>(I) AEIS</i>	<i>(J) AEIS</i>	<i>Mean Diff. (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
<b>Writing Assignments #1</b>	<b>Exemplary</b>	<b>Recognized</b>	-.06667	.47694	.999
		<b>Acceptable</b>	.69444	.44437	.405
		<b>Unacceptable</b>	.16667	.68841	.995
	<b>Recognized</b>	<b>Exemplary</b>	.06667	.47694	.999
		<b>Acceptable</b>	.76111(*)	.21403	.003
		<b>Unacceptable</b>	.23333	.56768	.976
	<b>Acceptable</b>	<b>Exemplary</b>	-.69444	.44437	.405
		<b>Recognized</b>	-.76111(*)	.21403	.003
		<b>Unacceptable</b>	-.52778	.54059	.763
	<b>Unacceptable</b>	<b>Exemplary</b>	-.16667	.68841	.995
		<b>Recognized</b>	-.23333	.56768	.976
		<b>Acceptable</b>	.52778	.54059	.763
<b>Group Projects #2</b>	<b>Exemplary</b>	<b>Recognized</b>	-.93333	.52933	.298
		<b>Acceptable</b>	.29167	.49317	.934
		<b>Unacceptable</b>	-.83333	.76402	.696
	<b>Recognized</b>	<b>Exemplary</b>	.93333	.52933	.298
		<b>Acceptable</b>	1.22500(*)	.23754	.000
		<b>Unacceptable</b>	.10000	.63003	.999
	<b>Acceptable</b>	<b>Exemplary</b>	-.29167	.49317	.934
		<b>Recognized</b>	-1.22500(*)	.23754	.000
		<b>Unacceptable</b>	-1.12500	.59997	.246
	<b>Unacceptable</b>	<b>Exemplary</b>	.83333	.76402	.696
		<b>Recognized</b>	-.10000	.63003	.999
		<b>Acceptable</b>	1.12500	.59997	.246
<b>Textbook-Based Assignments #3</b>	<b>Exemplary</b>	<b>Recognized</b>	.20000	.42845	.966
		<b>Acceptable</b>	-.51389	.39919	.573
		<b>Unacceptable</b>	.00000	.61842	1.000
	<b>Recognized</b>	<b>Exemplary</b>	-.20000	.42845	.966
		<b>Acceptable</b>	-.71389(*)	.19227	.002
		<b>Unacceptable</b>	-.20000	.50996	.979
	<b>Acceptable</b>	<b>Exemplary</b>	.51389	.39919	.573
		<b>Recognized</b>	.71389(*)	.19227	.002
		<b>Unacceptable</b>	.51389	.48563	.716
	<b>Unacceptable</b>	<b>Exemplary</b>	.00000	.61842	1.000
		<b>Recognized</b>	.20000	.50996	.979
		<b>Acceptable</b>	-.51389	.48563	.716
		<b>Recognized</b>	-.13333	.43402	.990
<b>Discussion Groups #4</b>	<b>Exemplary</b>	<b>Acceptable</b>	1.20833(*)	.40437	.019
		<b>Unacceptable</b>	.16667	.62645	.993
		<b>Exemplary</b>	.13333	.43402	.990
	<b>Recognized</b>	<b>Acceptable</b>	1.34167(*)	.19477	.000
		<b>Unacceptable</b>	.30000	.51658	.938
		<b>Exemplary</b>	-1.20833(*)	.40437	.019
	<b>Acceptable</b>	<b>Recognized</b>	-1.34167(*)	.19477	.000
		<b>Unacceptable</b>	-1.04167	.49194	.156
		<b>Exemplary</b>	-.16667	.62645	.993
	<b>Unacceptable</b>	<b>Recognized</b>	-.30000	.51658	.938
		<b>Acceptable</b>	1.04167	.49194	.156
		<b>Recognized</b>	.26667	.48580	.947

TABLE 4.15. Continued.

<i>Dependent Variable</i>	<i>(I) AEIS</i>	<i>(J) AEIS</i>	<i>Mean Diff. (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
<b>Open Response #6</b>	<b>Exemplary</b>	<b>Acceptable</b>	1.01389	.45261	.121
		<b>Unacceptable</b>	1.00000	.70119	.487
		<b>Exemplary</b>	-.26667	.48580	.947
	<b>Recognized</b>	<b>Acceptable</b>	.74722(*)	.21801	.005
		<b>Unacceptable</b>	.73333	.57821	.585
		<b>Exemplary</b>	-1.01389	.45261	.121
	<b>Acceptable</b>	<b>Recognized</b>	-.74722(*)	.21801	.005
		<b>Unacceptable</b>	-.01389	.55063	1.000
		<b>Exemplary</b>	-1.00000	.70119	.487
	<b>Unacceptable</b>	<b>Recognized</b>	-.73333	.57821	.585
		<b>Acceptable</b>	.01389	.55063	1.000
<b>True False #7</b>	<b>Exemplary</b>	<b>Recognized</b>	-.73333	.41219	.290
		<b>Acceptable</b>	-.22222	.38403	.938
		<b>Unacceptable</b>	.33333	.59494	.943
	<b>Recognized</b>	<b>Exemplary</b>	.73333	.41219	.290
		<b>Acceptable</b>	.51111(*)	.18498	.035
		<b>Unacceptable</b>	1.06667	.49060	.139
	<b>Acceptable</b>	<b>Exemplary</b>	.22222	.38403	.938
		<b>Recognized</b>	-.51111(*)	.18498	.035
		<b>Unacceptable</b>	.55556	.46720	.635
	<b>Unacceptable</b>	<b>Exemplary</b>	-.33333	.59494	.943
		<b>Recognized</b>	-1.06667	.49060	.139
		<b>Acceptable</b>	-.55556	.46720	.635
<b>Manipulatives #8</b>	<b>Exemplary</b>	<b>Recognized</b>	.26667	.46920	.941
		<b>Acceptable</b>	1.25000(*)	.43715	.027
		<b>Unacceptable</b>	1.00000	.67724	.456
	<b>Recognized</b>	<b>Exemplary</b>	-.26667	.46920	.941
		<b>Acceptable</b>	.98333(*)	.21056	.000
		<b>Unacceptable</b>	.73333	.55846	.557
	<b>Acceptable</b>	<b>Exemplary</b>	-1.25000(*)	.43715	.027
		<b>Recognized</b>	-.98333(*)	.21056	.000
		<b>Unacceptable</b>	-.25000	.53182	.965
	<b>Unacceptable</b>	<b>Exemplary</b>	-1.00000	.67724	.456
		<b>Recognized</b>	-.73333	.55846	.557
		<b>Acceptable</b>	.25000	.53182	.965
		<b>Recognized</b>	.06667	.43918	.999
<b>Problem Solving #10</b>	<b>Exemplary</b>	<b>Acceptable</b>	.75000	.40918	.265
		<b>Unacceptable</b>	1.00000	.63390	.397
		<b>Exemplary</b>	-.06667	.43918	.999
	<b>Recognized</b>	<b>Acceptable</b>	.68333(*)	.19709	.004
		<b>Unacceptable</b>	.93333	.52273	.287
		<b>Exemplary</b>	-.75000	.40918	.265
	<b>Acceptable</b>	<b>Recognized</b>	-.68333(*)	.19709	.004
		<b>Unacceptable</b>	.25000	.49779	.958
		<b>Exemplary</b>	-1.00000	.63390	.397
	<b>Unacceptable</b>	<b>Recognized</b>	-.93333	.52273	.287
		<b>Acceptable</b>	-.25000	.49779	.958

TABLE 4.15. Continued.

<i>Dependent Variable</i>	<i>(I) AEIS</i>	<i>(J) AEIS</i>	<i>Mean Diff. (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
<b>Project-Based Assignments #13</b>	<b>Exemplary</b>	<b>Recognized</b>	.26667	.50441	.952
		<b>Acceptable</b>	.87500	.46996	.252
		<b>Unacceptable</b>	.83333	.72806	.663
	<b>Recognized</b>	<b>Exemplary</b>	-.26667	.50441	.952
		<b>Acceptable</b>	.60833(*)	.22636	.042
		<b>Unacceptable</b>	.56667	.60037	.781
	<b>Acceptable</b>	<b>Exemplary</b>	-.87500	.46996	.252
		<b>Recognized</b>	-.60833(*)	.22636	.042
		<b>Unacceptable</b>	-.04167	.57173	1.000
	<b>Unacceptable</b>	<b>Exemplary</b>	-.83333	.72806	.663
		<b>Recognized</b>	-.56667	.60037	.781
		<b>Acceptable</b>	.04167	.57173	1.000
<b>Guest Speakers #20</b>	<b>Exemplary</b>	<b>Recognized</b>	-.20000	.48408	.976
		<b>Acceptable</b>	.48611	.45101	.704
		<b>Unacceptable</b>	.16667	.69871	.995
	<b>Recognized</b>	<b>Exemplary</b>	.20000	.48408	.976
		<b>Acceptable</b>	.68611(*)	.21724	.011
		<b>Unacceptable</b>	.36667	.57617	.920
	<b>Acceptable</b>	<b>Exemplary</b>	-.48611	.45101	.704
		<b>Recognized</b>	-.68611(*)	.21724	.011
		<b>Unacceptable</b>	-.31944	.54868	.937
<b>Collaborative Teaching #25</b>	<b>Exemplary</b>	<b>Acceptable</b>	.50704	.39285	.571
		<b>Unacceptable</b>	.50000	.60842	.844
	<b>Recognized</b>	<b>Exemplary</b>	.20000	.42153	.965
		<b>Acceptable</b>	.70704(*)	.18940	.002
		<b>Unacceptable</b>	.70000	.50172	.506
	<b>Acceptable</b>	<b>Exemplary</b>	-.50704	.39285	.571
		<b>Recognized</b>	-.70704(*)	.18940	.002
		<b>Unacceptable</b>	-.00704	.47787	1.000
<b>Primary Sources #31</b>	<b>Exemplary</b>	<b>Recognized</b>	.33333	.41278	.851
		<b>Acceptable</b>	1.34921(*)	.38568	.004
		<b>Unacceptable</b>	1.33333	.59579	.122
	<b>Recognized</b>	<b>Exemplary</b>	-.33333	.41278	.851
		<b>Acceptable</b>	1.01587(*)	.18751	.000
		<b>Unacceptable</b>	1.00000	.49130	.184
	<b>Acceptable</b>	<b>Exemplary</b>	-1.34921(*)	.38568	.004
		<b>Recognized</b>	-1.01587(*)	.18751	.000
		<b>Unacceptable</b>	-.01587	.46877	1.000
	<b>Unacceptable</b>	<b>Exemplary</b>	-1.33333	.59579	.122
		<b>Recognized</b>	-1.00000	.49130	.184
		<b>Acceptable</b>	.01587	.46877	1.000

TABLE 4.15. Continued.

<i>Dependent Variable</i>	<i>(I) AEIS</i>	<i>(J) AEIS</i>	<i>Mean Diff. (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
<b>Newspapers #32</b>	<b>Exemplary</b>	<b>Recognized</b>	.00000	.53560	1.000
		<b>Acceptable</b>	.86111	.49902	.317
		<b>Unacceptable</b>	.50000	.77307	.916
	<b>Recognized</b>	<b>Exemplary</b>	.00000	.53560	1.000
		<b>Acceptable</b>	.86111(*)	.24036	.003
		<b>Unacceptable</b>	.50000	.63749	.861
	<b>Acceptable</b>	<b>Exemplary</b>	-.86111	.49902	.317
		<b>Recognized</b>	-.86111(*)	.24036	.003
		<b>Unacceptable</b>	-.36111	.60708	.933
	<b>Unacceptable</b>	<b>Exemplary</b>	-.50000	.77307	.916
		<b>Recognized</b>	-.50000	.63749	.861
		<b>Acceptable</b>	.36111	.60708	.933
<b>Lab Equipment #34</b>	<b>Exemplary</b>	<b>Recognized</b>	.20000	.40142	.959
		<b>Acceptable</b>	.92958	.37411	.069
		<b>Unacceptable</b>	1.00000	.57940	.317
	<b>Recognized</b>	<b>Exemplary</b>	-.20000	.40142	.959
		<b>Acceptable</b>	.72958(*)	.18036	.001
		<b>Unacceptable</b>	.80000	.47779	.343
	<b>Acceptable</b>	<b>Exemplary</b>	-.92958	.37411	.069
		<b>Recognized</b>	-.72958(*)	.18036	.001
		<b>Unacceptable</b>	.07042	.45508	.999
	<b>Unacceptable</b>	<b>Exemplary</b>	-1.00000	.57940	.317
		<b>Recognized</b>	-.80000	.47779	.343
		<b>Acceptable</b>	-.07042	.45508	.999
<b>Calculators #35</b>	<b>Exemplary</b>	<b>Recognized</b>	.20000	.45907	.972
		<b>Acceptable</b>	.74648	.42783	.307
		<b>Unacceptable</b>	1.00000	.66261	.436
	<b>Recognized</b>	<b>Exemplary</b>	-.20000	.45907	.972
		<b>Acceptable</b>	.54648(*)	.20626	.046
		<b>Unacceptable</b>	.80000	.54640	.463
	<b>Acceptable</b>	<b>Exemplary</b>	-.74648	.42783	.307
		<b>Recognized</b>	-.54648(*)	.20626	.046
		<b>Unacceptable</b>	.25352	.52043	.962
	<b>Unacceptable</b>	<b>Exemplary</b>	-1.00000	.66261	.436
		<b>Recognized</b>	-.80000	.54640	.463
		<b>Acceptable</b>	-.25352	.52043	.962
<b>Use Of Manipulatives #38</b>	<b>Exemplary</b>	<b>Recognized</b>	-.13333	.52890	.994
		<b>Acceptable</b>	.72300	.49291	.462
		<b>Unacceptable</b>	.66667	.76339	.819
	<b>Recognized</b>	<b>Exemplary</b>	.13333	.52890	.994
		<b>Acceptable</b>	.85634(*)	.23764	.003
		<b>Unacceptable</b>	.80000	.62951	.584
	<b>Acceptable</b>	<b>Exemplary</b>	-.72300	.49291	.462
		<b>Recognized</b>	-.85634(*)	.23764	.003
		<b>Unacceptable</b>	-.05634	.59959	1.000
	<b>Unacceptable</b>	<b>Exemplary</b>	-.66667	.76339	.819
		<b>Recognized</b>	-.80000	.62951	.584
		<b>Acceptable</b>	.05634	.59959	1.000

TABLE 4.15. Continued.

<i>Dependent Variable</i>	<i>(I) AEIS</i>	<i>(J) AEIS</i>	<i>Mean Diff. (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
<b>Maps/Globes #39</b>	<b>Exemplary</b>	<b>Recognized</b>	-.20000	.42447	.965
		<b>Acceptable</b>	.37089	.39559	.785
		<b>Unacceptable</b>	.66667	.61268	.698
	<b>Recognized</b>	<b>Exemplary</b>	.20000	.42447	.965
		<b>Acceptable</b>	.57089(*)	.19072	.019
		<b>Unacceptable</b>	.86667	.50522	.322
	<b>Acceptable</b>	<b>Exemplary</b>	-.37089	.39559	.785
		<b>Recognized</b>	-.57089(*)	.19072	.019
		<b>Unacceptable</b>	.29577	.48121	.927
	<b>Unacceptable</b>	<b>Exemplary</b>	-.66667	.61268	.698
		<b>Recognized</b>	-.86667	.50522	.322
		<b>Acceptable</b>	-.29577	.48121	.927

Data from Table 4.15 also indicates that principals from exemplary and recognized campuses had a higher perceived increase in the use of manipulatives (question 8) as an instructional strategy when compared to principals from acceptable campuses. Data further indicates that principals from recognized campuses had a higher perceived increase in the use of problem solving (question 10) as an instructional strategy when compared to principals from acceptable campuses. Additionally, data indicates that principals from recognized campuses had a higher perceived increase in the use of project-based assignments (question 13) as an instructional strategy when compared to principals from acceptable campuses. Moreover, data indicates that principals from recognized campuses had a higher perceived increase in the use of guest speakers (question 20) as an instructional strategy when compared to principals from acceptable campuses. Again, data indicates that principals from recognized campuses had a higher perceived increase in the use of collaborative teaching (question 25) as a teaching technique when compared to principals from acceptable campuses.

Data also indicates that principals from exemplary and recognized campuses had a higher perceived increase in the use of primary source material (question 31) as an instructional material/tool when compared to principals from acceptable campuses. Furthermore, data indicates that principals from recognized campuses had a higher perceived increase in the use of newspapers (question 32) as an instructional material/tool when compared to principals from acceptable campuses. Data again indicates that principals from recognized campuses had a higher perceived increase in the use of lab equipment (question 34) as an instructional material/tool when compared to principals from acceptable campuses. Data once more indicates that principals from recognized campuses had a higher perceived increase in the use of calculators (question 35) as an instructional material/tool when compared to principals from acceptable campuses. Data shows that principals from recognized campuses had a higher perceived increase in the use of manipulatives (question 38) when compared to principals from acceptable campuses. Finally, data indicates that principals from recognized campuses had a higher perceived increase in the use of maps and globes (question 39) as an instructional material/tool when compared to principals from acceptable campuses.

Table 4.16 shows significant differences between principals of Regions I and XX in reference to instructional strategies questions 6, 11, and 16. Table 4.16 also shows that significant differences were indicated for teaching techniques question 23 and instructional tools and materials question 32. Principals in Region XX indicated more of “same” (no change) in the use of open response as an instructional strategy (question 6) when compared to principals of Region I. Principals in Region XX also indicated more

of “same” (no change) and a perceived increase use of worksheets as an instructional strategy (question 11) when compared to principals of Region I. In addition, principals in Region I indicated a higher perceived increase for the use of charts/webs and outlines as an instructional strategy (question 16) when compared to principals of Region XX.

Principals in Region I indicated a higher increase in the use of modeling as a teaching technique (question 23) when compared to principals of Region XX. Principals in Region I also indicated a higher perceived increase in the use of newspapers as an instructional tool and material (question 32) when compared to principals of Region XX.

TABLE 4.16. Significant Survey Items by Educational Service Center

<b>Instructional Strategies</b>		Sum of Squares	df	Mean Square	F	Sig.
6. Open Response	Between Groups	3.865	1	3.865	6.071	.016
	Within Groups	57.298	90	.637		
	Total	61.163	91			
11. Worksheets	Between Groups	7.475	1	7.475	10.890	.001
	Within Groups	61.775	90	.686		
	Total	69.250	91			
16. Charts/Webs/Outlines	Between Groups	1.686	1	1.686	4.330	.040
	Within Groups	35.042	90	.389		
	Total	36.728	91			
<b>Teaching Techniques</b>		Sum of Squares	df	Mean Square	F	Sig.
23. Modeling	Between Groups	2.110	1	2.110	4.180	.044
	Within Groups	44.923	89	.505		
	Total	47.033	90			
	Within Groups	49.727	81	.614		
	Total	50.096	82			
<b>Instructional Tools and Materials</b>		Sum of Squares	df	Mean Square	F	Sig.
32. Newspapers	Between Groups	6.791	1	6.791	9.114	.003
	Within Groups	67.067	90	.745		
	Total	73.859	91			

## Part II Influence Factors

In Part II of the survey, principals were asked to indicate what had influenced changes in their school's instructional practices since the implementation of TAKS and NCLB. A descriptive analysis was performed. The results are presented in Table 4.17 and every question is presented with its mode, median, and standard deviation. Detailed results are found in Appendix E. The data mean range was from 4.86 to 3.69. The influence factor with the highest mean was question 46, "interest in avoiding sanctions at my school." The influencing factor with the lowest mean was question 41, "personal desire to make changes."

TABLE 4.17. Results of Descriptive Analysis of Data

Question # and Item	Mean	Mode	Standard Deviation
41. Personal desire to make changes	3.69	4.0	0.77
42. Belief that such changes will benefit students	4.15	4.0	0.68
43. Changes in the types of assessment used for school accountability	4.10	4.0	0.87
44. Interest in helping my school improve TAKS scores	4.15	5.0	0.58
45. Interest in helping my students attain TAKS scores that will allow them to graduate	4.63	5.0	0.49
46. Interest in avoiding sanctions at my school	4.64	4.0	0.48
47. Interactions with other school principals	4.24	4.0	0.67
48. Interactions with colleagues	3.86	4.0	0.96
49. Staff development in which I have participated	4.15	4.0	0.70
50. Interactions with parents	4.24	4.0	0.74
51. Curriculum was aligned to coordinate with state standards	3.95	4.0	0.81

A Likert-type scale was used with responses indicated as "SD" for strongly disagree, "D" for disagree, "U" for undecided, "A" for agree, and "SA" for strongly



agree. Table 4.18 indicates these results in terms of frequencies and percentages with the frequencies followed by percentages in parentheses. Detailed results are found in Appendix F. The data shows the majority of principals either “agree” or “strongly agree” with the presented influence factors.

TABLE 4.18. Survey Results for Part II

Question # and Item	SD	D	U	A	SA
41. Personal desire to make changes	0(0)	4(4)	3(3)	59(64)	25(27)
42. Belief that such changes will benefit students	5(5)	0(0)	0(0)	62(67)	24(26)
43. Changes in the types of assessment used for school accountability	0(0)	0(0)	9(9)	59(64)	23(25)
44. Interest in helping my school improve TAKS scores	0(0)	0(0)	0(0)	34(37)	57(63)
45. Interest in helping my students attain TAKS scores that will allow them to graduate	0(0)	0(0)	0(0)	33(36)	58(64)
46. Interest in avoiding sanctions at my school	1(1)	2(2)	0(0)	59(65)	29(32)
47. Interactions with other school principals	0(0)	14(15)	7(8)	48(53)	22(24)
48. Interactions with colleagues	0(0)	5(6)	1(1)	60(66)	25(28)
49. Staff development in which I have participated	0(0)	1(1)	13(14)	40(44)	37(40)
50. Interactions with parents	0(0)	9(10)	5(6)	59(65)	18(20)
51. Curriculum was aligned to coordinate with state standards	1(1)	0(0)	0(0)	57(63)	33(36)

Notes: SD=Strong Disagree D= Disagree U=Undecided A=Agree SA=Strongly

Percentages were rounded up to the nearest percent

Table 4.19 shows that the mean ranged from 4.64 to 3.69; this indicates that the majority of principals agreed with all influencing factors presented. Analysis indicates that principals felt that question 46, “interest in avoiding sanctions at my school,” and question 45, “interest in helping my students attain TAKS scores that will allow them to graduate,” had the greatest influence on changes in instructional practices. In all, 96.7% of principals agreed with question 46 and 100% agreed with question 45. Additionally,

question 45 had the highest percent (63.7) of “strongly agree.” Furthermore, question 46 had the lowest standard deviation (0.48) and question 45 had the second lowest standard deviation (0.49) for all questions in Part II. This indicates these questions had the least amount of variance among principals. The mean scores of question 46 and 45 is important because of the perceptions that principals’ interest both in avoiding sanctions and in helping students attain TAKS scores that will allow them to graduate are influencing changes in instructional practices.

Question 47 (interactions with other school principals) had the next highest mean of 76.9%, followed by question 50 (interactions with parents), with 84.6% of principals agreeing with these questions. This is important to note because of the perceptions that the principals’ interactions with other school principals and with parents do influence changes in instructional practices. A mean of 3.69 was indicated by principals for question 41 (personal desire to make changes).

In summary, data indicates that changes to instructional practices are due to principals wanting to avoid sanction and wanting students to graduate. Both of these factors play a major part in the Texas accountability system.

TABLE 4.19. Influence Factors

Question # and Item	Mean	SD	% Agree	% Strongly Agree	Total % Agree
46. Interest in avoiding sanctions at my school	4.64	0.48	64.80	31.90	96.70
45. Interest in helping my students attain TAKS scores that will allow them to graduate	4.63	0.49	36.30	63.70	100.00
47. Interactions with other school principals	4.24	0.67	52.70	24.20	76.90
50. Interactions with parents	4.24	0.74	64.80	19.80	84.60
42. Belief that such changes will benefit students	4.15	0.68	68.10	26.40	94.50
44. Interest in helping my school improve TAKS scores	4.15	0.58	37.40	62.60	100.00
49. Staff development in which I have participated	4.15	0.70	44.00	40.70	84.70
43. Changes in the types of assessment used for school accountability	4.10	0.87	64.80	25.30	90.10
51. Curriculum was aligned to coordinate with state standards	3.95	0.81	62.60	36.30	98.90
48. Interactions with colleagues	3.86	0.96	65.90	27.50	93.40
41. Personal desire to make changes	3.69	0.77	64.80	27.50	92.30

For additional information, the results of Part II were also analyzed according to demographic information. This included gender, years of classroom teaching experience, years of experience as an administrator, years of experience as a principal prior to the implementation of TAKS and or NCLB, years of experience as a campus principal, AYP status, AEIS campus rating, and location by Educational Service Center (Region I and Region XX). The analyses were conducted by using Analysis of Variance (ANOVA) and post hoc analysis (Tukey HSD) for the SPSS computer statistic program version 13.0. Only those questions that were significant ( $p < .05$ ) are identified below.

#### *Teaching Experience*

Table 4.20 shows significant differences using the post hoc analysis (Tukey HSD) for question 47 (interactions with other school principals). Those principals with 0

to 5 years teaching experience disagreed more than did principals with 6 to 10 years teaching experience.

TABLE 4.20 Significant Survey Items Part II - Teaching Experience

<i>Dependent Variable</i>	<i>(I) teach exp</i>	<i>(J) teach exp</i>	<i>Mean Diff. (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
<b>Interactions With Principals #47</b>	<b>0-5 Yrs</b>	<b>6-10 Yrs</b>	-1.37647(*)	.44415	.031
		<b>11-15 Yrs</b>	-.85217	.45757	.432
		<b>16-20 Yrs</b>	-1.03333	.46878	.247
		<b>21-25 Yrs</b>	-1.00000	.58648	.532
		<b>26 Plus Yrs</b>	-1.03333	.56151	.446
	<b>6-10 Yrs</b>	<b>0-5 Yrs</b>	1.37647(*)	.44415	.031
		<b>11-15 Yrs</b>	.52430	.25036	.300
		<b>16-20 Yrs</b>	.34314	.27030	.801
		<b>21-25 Yrs</b>	.37647	.44415	.958
		<b>26 Plus Yrs</b>	.34314	.41062	.960
	<b>11-15 Yrs</b>	<b>0-5 Yrs</b>	.85217	.45757	.432
		<b>6-10 Yrs</b>	-.52430	.25036	.300
		<b>16-20 Yrs</b>	-.18116	.29182	.989
		<b>21-25 Yrs</b>	-.14783	.45757	1.000
		<b>26 Plus Yrs</b>	-.18116	.42509	.998
	<b>16-20 Yrs</b>	<b>0-5 Yrs</b>	1.03333	.46878	.247
		<b>6-10 Yrs</b>	-.34314	.27030	.801
		<b>11-15 Yrs</b>	.18116	.29182	.989
		<b>21-25 Yrs</b>	.03333	.46878	1.000
		<b>26 Plus Yrs</b>	.00000	.43714	1.000
	<b>21-25 Yrs</b>	<b>0-5 Yrs</b>	1.00000	.58648	.532
		<b>6-10 Yrs</b>	-.37647	.44415	.958
		<b>11-15 Yrs</b>	.14783	.45757	1.000
		<b>16-20 Yrs</b>	-.03333	.46878	1.000
		<b>26 Plus Yrs</b>	-.03333	.56151	1.000
	<b>26 Plus Yrs</b>	<b>0-5 Yrs</b>	1.03333	.56151	.446
		<b>6-10 Yrs</b>	-.34314	.41062	.960
		<b>11-15 Yrs</b>	.18116	.42509	.998
		<b>16-20 Yrs</b>	.00000	.43714	1.000
		<b>21-25 Yrs</b>	.03333	.56151	1.000

### *Administrative Experience*

In addition, Table 4.21 shows significant differences using the post hoc analysis (Tukey HSD) for question 46 (interest in avoiding sanctions at my school) The principals with 0 to 5 years administrative experience agreed more than did the principals with 6 to 10 years administrative experience.

TABLE 4.21 Significant Survey Items Part II- Administrative Experience

<i>Dependent Variable</i>	<i>(I) Adm exp</i>	<i>(J) Adm exp</i>	<i>Mean Diff. (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
<b>Avoiding Sanctions #46</b>	<b>0-5 Yrs</b>	<b>6-10 Yrs</b>	.13821	.14778	.936
		<b>11-15 Yrs</b>	.08333	.24902	.999
		<b>16-20 Yrs</b>	-.66667	.38104	.504
		<b>21-25 Yrs</b>	.00000	.38104	1.000
		<b>26 Plus Yrs</b>	1.33333(*)	.38104	.009
	<b>6-10 Yrs</b>	<b>0-5 Yrs</b>	-.13821	.14778	.936
		<b>11-15 Yrs</b>	-.05488	.24423	1.000
		<b>16-20 Yrs</b>	-.80488	.37793	.282
		<b>21-25 Yrs</b>	-.13821	.37793	.999
		<b>26 Plus Yrs</b>	1.19512(*)	.37793	.026
	<b>11-15 Yrs</b>	<b>0-5 Yrs</b>	-.08333	.24902	.999
		<b>6-10 Yrs</b>	.05488	.24423	1.000
		<b>16-20 Yrs</b>	-.75000	.42779	.501
		<b>21-25 Yrs</b>	-.08333	.42779	1.000
		<b>26 Plus Yrs</b>	1.25000(*)	.42779	.049
	<b>16-20 Yrs</b>	<b>0-5 Yrs</b>	.66667	.38104	.504
		<b>6-10 Yrs</b>	.80488	.37793	.282
		<b>11-15 Yrs</b>	.75000	.42779	.501
		<b>21-25 Yrs</b>	.66667	.51593	.789
		<b>26 Plus Yrs</b>	2.00000(*)	.51593	.003
	<b>21-25 Yrs</b>	<b>0-5 Yrs</b>	.00000	.38104	1.000
		<b>6-10 Yrs</b>	.13821	.37793	.999
		<b>11-15 Yrs</b>	.08333	.42779	1.000
		<b>16-20 Yrs</b>	-.66667	.51593	.789
		<b>26 Plus Yrs</b>	1.33333	.51593	.112
	<b>26 Plus Yrs</b>	<b>0-5 Yrs</b>	-1.33333(*)	.38104	.009
		<b>6-10 Yrs</b>	-1.19512(*)	.37793	.026
		<b>11-15 Yrs</b>	-1.25000(*)	.42779	.049
		<b>16-20 Yrs</b>	-2.00000(*)	.51593	.003
		<b>21-25 Yrs</b>	-1.33333	.51593	.112

### *Level of Education*

Table 4.22 shows significant differences exist among principals with master degrees and those with doctorates for question 46 (interest in avoiding sanctions at my school). Principals with masters' degrees agreed more than the principals with doctorates did.

TABLE 4.22 Significant Survey Items Part II-Level of Education

<b>Level of Education</b>						
		Sum of Squares	df	Mean Square	F	Sig
46. Interest in avoiding sanctions at my school	Between Groups	2.192	1	2.192	5.07	0.027
	Within Groups	38.489	89	0.432		
	Total	40.681	90			

### *AYP Status*

Table 4.23 shows significant differences also exist among principals for question 42 (belief that such changes will benefit students). Principals from campuses that missed AYP agreed more than principals from campuses that met AYP. In addition, significant differences exist among principals for question 46 (interest in avoiding sanctions at my school). Principals from campuses that missed AYP agreed more than principals from campuses that met AYP.

TABLE 4.23 Significant Survey Items Part II- AYP Status

AYP Status		Sum of Squares	df	Mean Square	F	Sig
42. Belief that such changes will benefit students	Between Groups	4.477	2	2.238	3.095	0.05
	Within Groups	63.633	88	0.723		
	Total	68.11	90			
46. Interest in avoiding sanctions at my school	Between Groups	3.753	2	1.877	4.472	0.014
	Within Groups	36.928	88	0.42		
	Total	40.681	90			

*AEIS Rating*

Table 4.24 shows significant differences using the post hoc analysis (Tukey HSD) for principals from campuses based on their AEIS rating. For question 41 (personal desire to make changes), principals from recognized campuses disagreed more than did the principals from acceptable campuses. For question 42 (belief that such changes will benefit students), principals from acceptable campuses disagreed more than did principals from recognized campuses. The responses to question 43 (changes in the types of assessment used for school accountability) also showed significant differences, with principals from campuses rated as acceptable having more undecided than the principals from campuses rated as recognized had. Furthermore, significant differences exist for question 46 (interest in avoiding sanctions at my school), with the principals from campuses that are acceptable campuses disagreed more than did the principals from campuses that are recognized.

Significant differences also exist for question 47 (interactions with other school principals) with principals from acceptable campuses disagreeing more than did the principals from campuses that are recognized. In addition, significant differences exist for question 48 (interactions with colleagues); principals from campuses rated as acceptable disagreed more than did the principals from campuses rated as recognized. There were also significant differences to the answers for question 49 (staff development in which I have participated). Principals from acceptable campuses disagree more than did principals from recognized campuses. Equally important were the significant differences in the answers to question 50 (interactions with parents). The principals from campuses rated as acceptable disagreed more than did principals from campuses that are rated as recognized.

Finally, significant differences exist in the responses for question 51 (curriculum was aligned to coordinate with state standards). Those principals from campuses that are rated as exemplary agreed more than did principals from campuses that are rated as unacceptable.



TABLE 4.24. Significant Survey Items Part II- AEIS Ratings

<i>Dependent Variable</i>	<i>(I) AEIS</i>	<i>(J) AEIS</i>	<i>Mean Diff. (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
<b>Desire To Change #41</b>	<b>Unacceptable</b>	<b>Exemplary</b>	.00000	.70719	1.000
		<b>Recognized</b>	.13333	.58316	.996
		<b>Acceptable</b>	.36620	.55545	.912
	<b>Exemplary</b>	<b>Recognized</b>	.00000	.40392	1.000
		<b>Acceptable</b>	.65258	.37644	.313
		<b>Unacceptable</b>	.16667	.58301	.992
	<b>Recognized</b>	<b>Exemplary</b>	.00000	.40392	1.000
		<b>Acceptable</b>	.65258(*)	.18149	.003
		<b>Unacceptable</b>	.16667	.48076	.986
	<b>Acceptable</b>	<b>Exemplary</b>	-.65258	.37644	.313
		<b>Recognized</b>	-.65258(*)	.18149	.003
		<b>Unacceptable</b>	-.48592	.45792	.714
	<b>Unacceptable</b>	<b>Exemplary</b>	-.16667	.58301	.992
		<b>Recognized</b>	-.16667	.48076	.986
		<b>Acceptable</b>	.48592	.45792	.714
<b>Changes Benefit Students #42</b>	<b>Exemplary</b>	<b>Recognized</b>	-.80000	.52204	.423
		<b>Acceptable</b>	.04225	.48651	1.000
		<b>Unacceptable</b>	.00000	.75349	1.000
	<b>Recognized</b>	<b>Exemplary</b>	.80000	.52204	.423
		<b>Acceptable</b>	.84225(*)	.23455	.003
		<b>Unacceptable</b>	.80000	.62135	.573
	<b>Acceptable</b>	<b>Exemplary</b>	-.04225	.48651	1.000
		<b>Recognized</b>	-.84225(*)	.23455	.003
		<b>Unacceptable</b>	-.04225	.59182	1.000
	<b>Unacceptable</b>	<b>Exemplary</b>	.00000	.75349	1.000
		<b>Recognized</b>	-.80000	.62135	.573
		<b>Acceptable</b>	.04225	.59182	1.000
<b>Changes In Assessments #43</b>	<b>Exemplary</b>	<b>Recognized</b>	-.13333	.31122	.973
		<b>Acceptable</b>	.66667	.29004	.106
		<b>Unacceptable</b>	.66667	.44921	.451
	<b>Recognized</b>	<b>Exemplary</b>	.13333	.31122	.973
		<b>Acceptable</b>	.80000(*)	.13983	.000
		<b>Unacceptable</b>	.80000	.37043	.143
	<b>Acceptable</b>	<b>Exemplary</b>	-.66667	.29004	.106
		<b>Recognized</b>	-.80000(*)	.13983	.000
		<b>Unacceptable</b>	.00000	.35282	1.000
	<b>Unacceptable</b>	<b>Exemplary</b>	-.66667	.44921	.451
		<b>Recognized</b>	-.80000	.37043	.143
		<b>Acceptable</b>	.00000	.35282	1.000

TABLE 4.24. Continued.

<i>Dependent Variable</i>	<i>(I) AEIS</i>	<i>(J) AEIS</i>	<i>Mean Diff. (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
<b>Avoiding Sanctions #46</b>	<b>Exemplary</b>	<b>Recognized</b>	-.73333	.39996	.265
		<b>Acceptable</b>	-.12676	.37274	.986
		<b>Unacceptable</b>	-1.00000	.57729	.313
	<b>Recognized</b>	<b>Exemplary</b>	.73333	.39996	.265
		<b>Acceptable</b>	.60657(*)	.17970	.006
		<b>Unacceptable</b>	-.26667	.47604	.944
	<b>Acceptable</b>	<b>Exemplary</b>	.12676	.37274	.986
		<b>Recognized</b>	-.60657(*)	.17970	.006
		<b>Unacceptable</b>	-.87324	.45342	.225
	<b>Unacceptable</b>	<b>Exemplary</b>	1.00000	.57729	.313
		<b>Recognized</b>	.26667	.47604	.944
		<b>Acceptable</b>	.87324	.45342	.225
<b>Interactions With Principals #47</b>	<b>Exemplary</b>	<b>Recognized</b>	-.06667	.55210	.999
		<b>Acceptable</b>	1.01878	.51453	.203
		<b>Unacceptable</b>	1.16667	.79689	.464
	<b>Recognized</b>	<b>Exemplary</b>	.06667	.55210	.999
		<b>Acceptable</b>	1.08545(*)	.24806	.000
		<b>Unacceptable</b>	1.23333	.65713	.246
	<b>Acceptable</b>	<b>Exemplary</b>	-1.01878	.51453	.203
		<b>Recognized</b>	-1.08545(*)	.24806	.000
		<b>Unacceptable</b>	.14789	.62590	.995
<b>Interactions With Colleagues #48</b>	<b>Exemplary</b>	<b>Recognized</b>	-.06667	.40708	.998
		<b>Acceptable</b>	.63850	.37939	.339
		<b>Unacceptable</b>	1.16667	.58758	.201
	<b>Recognized</b>	<b>Exemplary</b>	.06667	.40708	.998
		<b>Acceptable</b>	.70516(*)	.18291	.001
		<b>Unacceptable</b>	1.23333	.48453	.060
	<b>Acceptable</b>	<b>Exemplary</b>	-.63850	.37939	.339
		<b>Recognized</b>	-.70516(*)	.18291	.001
		<b>Unacceptable</b>	.52817	.46150	.663
<b>Staff Development #49</b>	<b>Exemplary</b>	<b>Recognized</b>	.26667	.43809	.929
		<b>Acceptable</b>	.90141	.40828	.129
		<b>Unacceptable</b>	.50000	.63233	.858
	<b>Recognized</b>	<b>Exemplary</b>	-.26667	.43809	.929
		<b>Acceptable</b>	.63474(*)	.19684	.009
		<b>Unacceptable</b>	.23333	.52143	.970
	<b>Acceptable</b>	<b>Exemplary</b>	-.90141	.40828	.129
		<b>Recognized</b>	-.63474(*)	.19684	.009
		<b>Unacceptable</b>	-.40141	.49665	.850
<b>Unacceptable</b>	<b>Unacceptable</b>	<b>Exemplary</b>	-.50000	.63233	.858
		<b>Recognized</b>	-.23333	.52143	.970
		<b>Acceptable</b>	.40141	.49665	.850

TABLE 4.24. Continued.

<i>Dependent Variable</i>	<i>(I) AEIS</i>	<i>(J) AEIS</i>	<i>Mean Diff. (I-J)</i>	<i>Std. Error</i>	<i>Sig.</i>
<b>Interactions With Parents #50</b>	<b>Exemplary</b>	<b>Recognized</b>	-.60000	.48290	.602
		<b>Acceptable</b>	.18310	.45004	.977
		<b>Unacceptable</b>	.50000	.69701	.890
	<b>Recognized</b>	<b>Exemplary</b>	.60000	.48290	.602
		<b>Acceptable</b>	.78310(*)	.21697	.003
		<b>Unacceptable</b>	1.10000	.57477	.230
	<b>Acceptable</b>	<b>Exemplary</b>	-.18310	.45004	.977
		<b>Recognized</b>	-.78310(*)	.21697	.003
		<b>Unacceptable</b>	.31690	.54745	.938
	<b>Unacceptable</b>	<b>Exemplary</b>	-.50000	.69701	.890
		<b>Recognized</b>	-1.10000	.57477	.230
		<b>Acceptable</b>	-.31690	.54745	.938
<b>Aligned Curriculum #51</b>	<b>Exemplary</b>	<b>Recognized</b>	.26667	.31330	.830
		<b>Acceptable</b>	.73239	.29198	.066
		<b>Unacceptable</b>	2.50000(*)	.45221	.000
	<b>Recognized</b>	<b>Exemplary</b>	-.26667	.31330	.830
		<b>Acceptable</b>	.46573(*)	.14077	.007
		<b>Unacceptable</b>	2.23333(*)	.37290	.000
	<b>Acceptable</b>	<b>Exemplary</b>	-.73239	.29198	.066
		<b>Recognized</b>	-.46573(*)	.14077	.007
		<b>Unacceptable</b>	1.76761(*)	.35518	.000
	<b>Unacceptable</b>	<b>Exemplary</b>	-2.50000(*)	.45221	.000
		<b>Recognized</b>	-2.23333(*)	.37290	.000
		<b>Acceptable</b>	-1.76761(*)	.35518	.000

### Summary of Findings

In terms of response frequencies for Part I, the instructional strategies portion of the survey, principals (high school principals) indicated a perceived increase in the use of seventeen instructional strategies. A great majority of principals indicated perceived increases in the use of the following four instructional strategies: problem-solving activities, open response questions, writing assignments, and creative/critical thinking questions. Most of the principals indicated a perceived decrease in the use of the following three instructional strategies: worksheets, true-false questions, and textbook-based assignments.

In terms of response frequencies for Part I, the teaching techniques portion of the survey, principals indicated a perceived increase in the use of six teaching techniques. These items include peer or cross-age tutoring, interdisciplinary instruction, facilitating/coaching, collaborative/team-teaching, modeling, and cooperative learning/group work. Principals indicated a decrease in the use of lecturing as a teaching technique.

In terms of response frequencies for Part I, the instructional materials and tools portion of the survey, principals indicated a perceived increase in the use of twelve instructional materials and tools. A great majority of principals indicated increases in the use of the following five instructional materials and tools: computers/educational software, calculators, computers/internet and/or on-line research service, lab equipment, and manipulatives. Principals indicated a decrease in the use of textbooks as an instructional material and tool.

For additional information, the results of the survey were also analyzed according to demographic information. This included gender, years of classroom teaching experience, years of experience as an administrator, years of experience as a principal prior to the implementation of TAKS and or NCLB, years of experience as a campus principal, AYP status, AEIS campus rating, and location by Educational Service Center (Region I and Region XX). This was done to determine the existence, if any, of significantly perceived differences.

Significant differences, primarily increases in instructional practices, were discovered between principals with varying years of classroom teaching experiences.

Data indicates that principals with 6 to 10 years teaching experience had a higher increase in the use of collaborative teaching a teaching technique when compared to other principals with 11 to 15 years of teaching experience.

Significant differences, primarily decreases in instructional practices, were discovered between principals who were principals prior to TAKS and or NCLB. Principals who were not principals prior to TAKS and NCLB indicated a larger decrease in the use of lecturing. They also indicated more of “same” (no change) in the use of lecturing as a teaching technique.

Significant differences, primarily increases to instructional practices, were discovered between principals with varying years as principals at their current campus. Principals with 0 to 5 years experience as principals at their current school indicated a higher increase in the use of supplementary books as an instructional material/tool when compared to principals who had 6 to 10 years of being a principal at their current school.

Significant differences, primarily increases to instructional practices, were discovered between principals based on AYP status for various instructional practices. These included open response questions, problem solving activities, use of worksheets, use of charts/webs/outlines, collaborative teaching, use of primary source materials, use of lab equipment, and the use of maps/globes. Principals from campuses that missed AYP indicated more of an increase to the use of open response questions, problem solving, use of lab equipment, and use of maps and globes when compared to principals from campuses that met AYP. Principals that missed AYP also indicated more of “same” (no change) to the use of primary sources when compared to principals that met

AYP. Principals from campuses that missed AYP had more of a decrease to worksheets when compared to campus principals that met AYP. Furthermore, principals from campuses that met AYP indicated for an increase in the use of charts/web/outlines and in collaborative teaching when compared to principals from campuses that missed AYP.

Significant differences, primarily increases to instructional practices, were discovered between principals based on AEIS campus rating for several instructional practices. Principals from recognized campuses had increases to writing assignments, group projects, open response questions, true and false questions, project based assignments, problem solving, guest speakers, collaborative teaching, newspapers, use of lab equipment, use of calculators, use of manipulatives and the use of maps and globes when compared to principals from acceptable campuses. Data also indicates that principals from acceptable campuses had increases to the use of textbooks when compared to principals from recognized campuses. Lastly, principals from exemplary and recognized campuses had increases to discussion groups, the use of manipulatives, and the use of primary source materials when compared to principals from acceptable campuses.

Significant differences, primarily increases to instructional practices, were discovered between principals based on location within an Educational Service Center (Regions I and XX) for some instructional practices. These included open response questions, use of worksheets, use of charts/webs/outlines, modeling, and the use of newspapers. Principals in Region XX indicated more of “same” (no change) in the use of open response and the use of worksheets when compared to principals of Region I. In

addition, principals in Region I indicated a higher increase for the use of charts/webs and outlines when compared to principals of Region XX.

In Part II of the survey, principals were asked to indicate what had influenced changes in their school's instructional practices since the implementation of TAKS and NCLB. Data indicates that the majority of principals agreed with all influencing factors presented. For additional information and exploratory purposes, the results of Part II were also analyzed according to demographic information. This included gender, years of classroom teaching experience, years of experience as an administrator, years of experience as a principal prior to the implementation of TAKS and or NCLB, years of experience as a campus principal, AYP status, AEIS campus rating, and location by Educational Service Center (Region I and Region XX).

Significant differences were discovered for influence factor question 47 (interactions with other school principals) between principals with varying years of classroom teaching experiences. Principals with 0 to 5 years teaching experience had a higher percent of "disagree" and "undecided" responses than did principals with 6 to 10 years of teaching.

Significant differences were discovered for influence factor question 46 (interest in avoiding sanctions at my school) between principals with varying years of administrative experiences. Principals with 0 to 5 years administrative experience had a higher percent of "disagree" and "undecided" responses than did principals with 6 to 10 years administrative experience.

Significant differences were discovered for influence factor question 46 (interest in avoiding sanctions at my school) between principals with varying levels of education. Principals with master degrees had a higher percent of “disagree” and “undecided” responses than did principals with doctorates.

Significant differences were discovered for influence factor question 42 (belief that such changes will benefit students) and question 46 (interest in avoiding sanctions at my school) between principals based on AYP status. Principals from campuses that missed AYP had a higher percent of “strongly disagree” and “agree” and “strongly agree” responses than did principals from campuses that met AYP.

Significant differences were discovered for influence factor question 47 (interactions with other school principals), question 48 (interactions with colleagues), question 49 (staff development in which I have participated), question 50 (interactions with parents), and question 51 (curriculum was aligned to coordinate with state standards). These differences were between principals from Exemplary, Recognized, and Acceptable campuses, and were based on the AEIS campus rating. Principals from Acceptable campuses indicated a higher percentage of “Disagree” and or “Undecided” responses than did principals from either Exemplary or Recognized campuses.

This chapter provided an overview of the perceptions and changes to instructional practices that high school principals have reported based on the impact of a high-stakes accountability system. Influence factors that may play a role in how principals implement instructional practices were also discussed. Finally, comparisons between principals were made based on selected demographic information.



## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Introduction

The purpose of this study was to examine the high school principals' perceptions regarding the impact of a high-stakes accountability system on instructional practices and influencing factors that may be contributing to changes in instructional practices. The study assessed the differences in perception about the impact of a high-stakes accountability system between and among high school principals based on campus ratings. In addition, the study determined the differences in perceptions toward the impact of a high-stakes accountability system based on selected demographic variables.

A review of the literature was conducted to obtain a comprehensive look at accountability movement that developed the high stakes tests, student learning, instruction, assessment and instructional leadership, and instructional best practices. This literature exploration provided the foundation for an in-depth look at the impact of assessment on student achievement, and learning, as well as the impact of assessment on instruction, assessment and instructional leadership, and instructional best practices.

Three research questions were posed for this study.

*Research Question 1:* What are the perceptions of high school principals regarding the impact of high-stakes accountability on instructional practices?

*Research Question 2:* Based on campus, state, and federal academic performance ratings, what are the differences in perceptions between high school principals

regarding the impact of a high-stakes accountability system on instructional practices?

*Research Question 3:* What are the differences in perceptions regarding the impact of a high-stakes accountability system among principals based upon gender, years of classroom teaching experience, years of experience as an administrator, years of experience as a principal prior to the implementation of TAKS and or NCLB, years of experience as a campus principal, and location by Educational Service Center (Regions I and XX)?

*Research Question 4:* What factors are currently influencing changes to instructional practices?

An online survey instrument was used to collect data for this study. The survey instrument consisted of a respondent demographic information section and a section to document the degree to which high school principals perceive the impact of high-stakes accountability on instructional practices, based on a Likert Scale.

The survey instrument was divided into three parts. Part I covered Instructional Practices, Part II was Influence Factors, and Part III contained Demographic Information. In Part I of the survey, items were divided into three sections: (1) instructional strategies (1-20), (2) teaching techniques (21-27), and (3) instructional materials and tools (28-40). A Likert-type scale was used, with responses designated “LD” for a large decrease, “D” for a decrease, “S” for same, “I” for increase, “LI” for a large increase, and “NA” for not applicable. For survey analysis, the following point

system was used. Responses for “LD” for a large decrease were given the value of “1.” Responses for “D” for a decrease were given a value of “2.” Responses for “S” for the same were given a value of “3.” Responses for “I” for increase were given a value of “4.” Responses for “LI” for large increase were given a value of “5.” Responses of “NA” for not applicable were given a value of “0.” In Part II of the survey, principals were asked to indicate what had influenced changes in their school’s instructional practices since the implementation of TAKS and NCLB.

For Part II a Likert-type scale was used, with responses designated “SD” for strongly disagree, “D” for disagree, “U” for undecided, “A” for agree, and “SA” for strongly agree. For survey analysis, the following point system was used. Responses for “SD” for strongly disagree were given a value of “1.” Responses for “D” for disagree were given a value of “2.” Responses for “U” for undecided were given a value of “3.” Responses for “A” for agree were given a value of “4.” Responses for “SA” for strongly agree were given a value of “5.”

In Part III, principals were asked for demographic information, which included the following items: gender, years of classroom teaching experience, years of experience as an administrator, whether or not the participant was a principal prior to the implementation of TAKS and or NCLB, years of experience as a campus principal, campus AYP status, AEIS campus rating, and location (Educational Service Center Region I or Region XX).

The survey population for this study included Texas high school principals from the selected 37 school districts in Education Service Center, Region I, and the selected

42 school districts in Education Service Center, Region XX. The researcher collected 92 completed surveys, or 72% of the possible sample.

Chapter IV centered on the examination of data from the responses gathered by the survey instrument. Various statistical analyses were used, including descriptive analysis, frequencies, and percentages. Additional analyses were conducted by using the analysis of variance, post hoc analysis (Tukey HSD), to determine if significant differences existed between principals based on selected demographic data provided by the principals.

This study is similar to Vogler's 2000 study entitled *The Impact of High-Stakes, State-Mandated Student Performance Assessment on 10<sup>th</sup> Grade English, Mathematics, and Science Teachers' Instructional Practices*. The researcher's study refined Vogler's survey. The instrument for this research study required minimal adjustments. References to the Texas Assessment of Knowledge and Skills (TAKS) and No Child Left Behind (NCLB) were done to meet the canons of rational and construct validity (Thorndike & Hagin, 1969).

### Summary of Findings

The following is a review of the findings for each research question.

*Research Question 1:* What are the perceptions of high school principals regarding the impact of high-stakes accountability on instructional practices?

### *Part I Instructional Practices*

The frequency counts and percentages show increases in the use of some instructional strategies as perceived by the principals who participated in the study. The largest percentages of increases for instructional strategies were for problem-solving activities, open response questions, writing assignments, and creative/critical thinking questions. These instructional practices are mentioned in the review of literature as instructional best practices, and all of them had a mean response above 4.0.

The frequency counts and percentages show decreases in the use of some instructional strategies as perceived by the principals who participated in the study. Decreases were indicated for the use of work sheets, true-false questions, and textbook-based assignments. The mean response range was from 2.75 to 2.37. According to the literature review, these instructional practices are considered inferior to other types of instructional practices because they develop lower order thinking skills (Cotton, 1989, 1999; Zemelman et al., 2005; Berliner, 2007; Downey et al., 2009).

### *Teaching Techniques*

Principals' perceptions revealed increases in the use of some teaching techniques. The largest percentages of increases for teaching techniques were for peer or cross-age tutoring, interdisciplinary instruction, facilitating/coaching, collaborative/team-teaching, modeling, and cooperative learning/group work. The mean response range was from 3.83 to 3.33. Based on the literature review, the above teaching techniques are those that develop higher order thinking skills (Cotton, 1989, 1999; Zemelman et al., 2005; Berliner, 2007; Downey et al., 2009).

Principals' perceptions indicated decreases in the use of some teaching techniques. Decreases were indicated for lecturing with a mean response of 2.25. According to the literature review, these instructional practices are considered inferior to other types of teaching techniques because they develop lower order thinking skills (Cotton, 1989, 1999; Marzano et al., 2001; Zemelman et al., 2005; Berliner, 2007; Downey et al., 2009).

#### *Instructional Materials and Tools*

The frequency counts and percentages show increases in the use of some instructional materials and tools. The largest percentages of increases for instructional materials and tools were for computers/educational software, calculators, computers/internet and/or on-line research service, lab equipment, and manipulatives. Based on the literature review, the above instructional materials and tools would be considered best practices because they provide opportunities for performance-based assessments (Cotton, 1989, 1999; Marzano et al., 2001; Zemelman et al., 2005; Berliner, 2007; Downey et al., 2009).

Principals' perceptions indicated decreases in the use of some instructional practices. Decreases were indicated for the use of textbooks with a mean response of 2.63. Based on the literature review, the use of textbooks would be considered instructionally poor (Cotton, 1989, 1999; Glickman, 1991; Zemelman et al., 2005; Berliner, 2007; Downey et al., 2009).

*Research Question 2:* Based on campus, state, and federal academic performance ratings, what are the differences in perceptions between high school principals regarding the impact of a high-stakes accountability system on instructional practices?

*AYP (Adequate Yearly Progress)*

The data analysis revealed significant differences ( $p < .05$ ) between principals from campuses that either met AYP or missed AYP. Principals from campuses that met AYP indicated an increase in the use of the following instructional strategies: open response questions, problem solving, use of worksheets, and the use of charts/webs/outlines. For teaching techniques, only one item was statistically significant, collaborative teaching. For instructional materials and tools, the statistically significant items were primary sources, lab equipment, and maps/globes.

*AEIS (Academic Excellence Indicator System)*

The data analysis revealed significant differences ( $p < .05$ ) between principals from campuses based on their AEIS campus ratings. Principals from campuses that were either Exemplary or Recognized indicated increases for all of the following instructional practices when compared to principals from Acceptable or Unacceptable campuses. For instructional strategies, these items were writing assignments, group projects, textbook-based assignments, discussion groups, open response questions, true-false questions, use of manipulatives, problem solving, project-based assignments, and the use of guest speakers. For teaching techniques, only one item was statistically significant, collaborative teaching. For instructional materials and tools, the statistically significant

items were primary sources, newspapers, lab equipment, calculators, internet, manipulatives, and maps/globes.

*Research Question 3:* What are the differences in perceptions regarding the impact of a high-stakes accountability system among principals based upon gender, years of classroom teaching experience, years of experience as an administrator, years of experience as a principal prior to the implementation of TAKS and or NCLB, years of experience as a campus principal, and location by Educational Service Center (Regions I and XX)?

#### *Gender*

The data analysis revealed significant differences ( $p < .05$ ) between principals based on gender. For instructional practices, only one item was statistically significant, the use of rubrics. Males indicated more of an increase in the use of rubrics. For instructional materials and tools, only one item was statistically significant, the use of internet resources. Males indicated more of an increase in the use of internet resources. For teaching techniques, no items were significant.

#### *Years of Classroom Teaching Experience*

The data analysis revealed significant differences ( $p < .05$ ) between principals based on classroom teaching experience for principals with 6 to 10 years teaching experience and principals with 11 to 15 years teaching experience. Data indicates that principals with 6 to 10 years teaching experience had a higher increase in the use of



collaborative teaching when compared to other principals with 11 to 15 years of experience.

*Years of Experience as an Administrator*

The data analysis revealed significant differences ( $p < .05$ ) between principals based on years of administrative experience for principals with 0 to 5 years and 6 to 10 years of administrative experience. Data indicates that principals with 0 to 5 years of administrative experience indicated a higher increase in the use of rubrics when compared to principals with 16-20 years of administrative experience. Data indicates that principals with 6 to 10 years of administrative experience indicated a higher increase in the use of computers/educational software when compared to principals with 16 to 20 years of administrative experience.

*Years of Experience as a Principal Prior to the Implementation of TAKS and/or NCLB*

The data analysis revealed significant differences ( $p < .05$ ) between principals based on years of experience of being a principal prior to the implementation of TAKS and/or NCLB. Principals who were not principals prior to TAKS and NCLB indicated a larger decrease in the use of lecturing. They also indicated more of “same” (no change) in the use of lecturing as a teaching technique.

*Years of Experience as a Campus Principal at Current School*

The data analysis revealed significant differences ( $p < .05$ ) between principals based on years of experience as a campus principal at their current schools. Principals with 0 to 5 years experience as principals at their current school indicated a higher

increase in the use of supplementary books when compared to principals who had 6 to 10 years of being a principal at their current school.

*Location by Educational Service Center (Region 1 and Region 20)*

Principals in Region XX indicated more of “same” (no change) in the use of open response when compared to principals of Region I. Principals in Region XX also indicated more of “same” (no change) and a an increase use of worksheets as an instructional strategy when compared to principals of Region I. In addition, principals in Region I indicated a higher increase for the use of charts/webs and outlines as an instructional strategy when compared to principals of Region XX. Principals in Region I indicated a higher increase in the use of modeling when compared to principals of Region XX. Principals in Region I also indicated a higher increase in the use of newspapers when compared to principals of Region XX.

*Research Question 4: What factors are currently influencing changes to instructional practices?*

The frequency counts and percentages show that principals felt that changes to instructional practices were most influenced by an “interest in avoiding sanctions at my school,” an “interest in helping my students attain TAKS scores that will allow them to graduate,” “interactions with other school principals,” “interactions with parents,” “belief that such changes will benefit students,” “interest in helping my school improve TAKS scores,” “staff development in which I have participated,” and “changes in the types of assessment used for school accountability.” The above mean response range

was from 4.64 to 4.10. These findings suggest that principals are changing instructional practices based on accountability mandates. The principals' demographic data were analyzed for additional information and exploratory purposes.

*AYP (Adequate Yearly Progress)*

The data analysis for influencing factors revealed significant differences ( $p < .05$ ) between principals from campuses that either met AYP or missed AYP. Significant influence factors as indicated by both sets of principals were “a belief that such changes will benefit students” and “an interest in avoiding sanctions at my school.” Principals from campuses that missed AYP disagreed with “a belief that such changes will benefit students” when compared to principals from campuses that met AYP. Additionally, principals from campuses that missed AYP were more in agreement with an “interest in avoiding sanctions at my school.” This finding indicates that principals who are struggling to meet AYP mandates are more influenced to make changes to instructional practices because they want to avoid sanctions rather than making changes that will benefit students.

*AEIS (Academic Excellence Indicator System)*

Principals from recognized campuses disagreed more than did the principals from acceptable campuses for a “personal desire to make changes.”

Principals from acceptable campuses disagreed more than did principals from recognized campuses for a “belief that such changes will benefit students.”

The responses “changes in the types of assessment used for school accountability” also showed significant differences, with principals from campuses rated

as acceptable having more undecided than did the principals from campuses rated as recognized.

Furthermore, significant differences exist for an “interest in avoiding sanctions at my school,” with the principals from campuses that are acceptable campuses disagreed more than did the principals from campuses that are recognized.

Significant differences also exist for “interactions with other school principals,” with principals from acceptable campuses disagreeing more than did the principals from campuses that are recognized.

In addition, significant differences exist for “interactions with colleagues.” Principals from campuses rated as acceptable disagreed more than did the principals from campuses rated as recognized.

There were also significant differences to the answers for “staff development in which I have participated.” Principals from acceptable campuses disagree more than did principals from recognized campuses.

Equally important were the significant differences in the responses to “interactions with parents.” The principals from campuses rated as acceptable disagreed more than did principals from campuses that are rated as recognized.

Finally, significant differences exist in the responses to “curriculum was aligned to coordinate with state standards.” Those principals from campuses that are rated as exemplary agreed more than did principals from campuses that are rated as unacceptable.

The above data indicates that principals from recognized campuses realize the importance of changing instructional practices due to a changing state assessment (TAKS). Principals from recognized campuses may be making changes to avoid sanctions and are making changes based on staff development. Furthermore, this indicates that principals from recognized campuses may be communicating and or collaborating with other principals more frequently. Furthermore, data indicates that principals from unacceptable campuses may not have an aligned curriculum, thereby contributing to the lack of student performance.

#### *Years of Classroom Teaching Experience*

The data analysis revealed significant differences ( $p < .05$ ) between principals based on classroom teaching experience. Principals felt that changes to instructional practices were most influenced by “interactions with other school principals.” Principals with 0 to 5 years teaching experience had a higher percent of “disagree” and “undecided” when compared to principals with 6 to 10 years teaching experience. This indicates that principals with only 0 to 5 years teaching experience may not be collaborating and/or communicating with principals with more teaching experience.

#### *Years of Experience as an Administrator*

The data analysis revealed significant differences ( $p < .05$ ) between principals based on years of administrative experience. Principals felt that changes to instructional practices were most influenced by an “interest in avoiding sanctions at my school.” Principals with 0 to 5 years administrative experience had a higher percent of “agree” and “strongly agree” when compared to principals with 6 to 10 years administrative

experience. This indicates that principals with 0 to 5 years of administrative experience tend to be more concerned with avoiding sanctions than more experienced principals.

#### *Level of Education*

The data analysis revealed significant differences ( $p < .05$ ) between principals based on their level of education. Principals felt that changes to instructional practices were most influenced by an “interest in avoiding sanction at my school.” Principals with master degrees had a higher percent of “agree” and “strongly agree” when compared to principals with a doctorate. This indicates that principals with master degrees tend to make instructional changes based on avoiding sanctions.

Five selected demographic variables indicated a level of significance at  $p < .05$ . The demographic variables were AYP status, AEIS rating, years of classroom teaching experience, years of experience as an administrator, and level of education. A reoccurring influencing factor in four out the five was an “interest in avoiding sanctions at my school.” This indicates that principals tend to make instructional decisions based on state and federal mandates. Both state and federal systems impose sanctions on campuses with low student performance.

### Conclusions

As part of a high-stakes accountability system, states have instituted comprehensive assessments to measure student achievement. According to the United States Department of Education (2008), states are required to set standards delineating what students should know, align their curriculum and instruction to these standards,

measure the performance of students against said standards, report the results of the performance to the public, implement improvement strategies, and provide support services and expanded choices to students in underperforming schools. Many decisions regarding state-mandated assessments that impose sanctions and or punishments for low student performance are guided by state and federal legislators. In terms of high-stakes accountability and according to Peterson and West (2003), for educational reform to take place, sanctions and incentives must be in place. There must be consequences for those schools and districts who do not meet standards as well as incentives for those that do. While incentives can help districts meet standards, consequences and sanctions can improve student learning as this study found. Principals are making changes to instructional practices in order to avoid sanctions for low student performance. Several research studies show that accountability measures are making a difference in positive student outcome (Lunenburg 1995; Elmore, 2000; Lunenburg & Ornstein, 2000; Carnoy et al., 2000; Elmore, 2001; Skrla & Scheurich, 2001; Chatterji, 2004; Skrla et al., 2004). Because of accountability mandates, principals may be changing instructional practices in order to meet accountability mandates.

Leithwood notes that strong instructional practices need to be supported by the instructional leader in order for them to be successful (2001). The goal is to achieve optimal instruction, thereby resulting in student achievement. Educational leaders should refocus the mission and vision of their school to reflect the importance of life-long learning through proven instructional practices. This type of learning will endure and

will improve student performance not only in high-stakes assessments but also in the students' future.

Principal/respondent data in this study indicates a change to instructional best practices as discussed in the review of literature. Increased use of certain instructional practices since the implementation of TAKS and NCLB, as indicated by principals, included problem-solving activities, open response questions, writing assignments, creative/critical thinking questions, peer or cross-age tutoring, interdisciplinary instruction, facilitating/coaching, collaborative/team-teaching, modeling, cooperative learning/group work, computers/educational software, calculators, computers/internet and/or on-line research service, lab equipment, and manipulatives. According to the data gathered for this study, most of the increase in the use of these instructional practices was indicated by principals from either Exemplary and or Recognized campuses. These instructional practices are described in the literature review as best practices. As Williams (2003) describes, instruction should incorporate new definitions of intelligence, alternate forms of assessments, increased collaborative learning, use of innovative and adaptive instructional strategies, and most importantly, focus on problem solving and the use of concepts and skills applied to real-world settings. In addition, students should be provided with appropriate resources and materials in order to take advantage of the learning process. Authentic experiences can be enhanced by using supplementary resources and materials. The key is to move away from textbook learning and create avenues for alternate learning styles. This strategy allows students to make



meaningful connections to learning even after taking high-stakes assessments (Cotton, 1989, 1999; Zemelman et al., 2005; Berliner, 2007; Downey et al., 2009).

These results indicate that accountability has had a positive impact on instructional practices. Furthermore, the data in this study indicates that in terms of principal perceptions, the principals are not subjecting students to test taking strategies and repetitive instructional strategies. Rather, students are being exposed to instructional best practices. Instructional best practices are teaching practices that guide student learning. Effective practices have been identified through research on student learning and student achievement. Research continues to confirm the positive results from the use of more progressive teaching strategies rather than traditional teaching strategies. Best practices provide better preparation for students to excel in both learning and assessment (Marzano, 2003; Zemelman et al., 2005).

This finding goes against the comments made by Smyth (2008). Smyth contends that high-stakes testing has placed both students and teachers in a position of learning and teaching to the test through test taking strategies, practice tests, drill activities, and the teacher's inability to be creative in the classroom. In fact, the data from this study shows that in terms of principal perceptions, the principals are decreasing the use of work sheets, true-false questions, textbook-based assignments, lecturing, and the use of textbooks.

The major factors influencing principals to make changes to instructional practices were an interest in avoiding sanctions, an interest in helping students graduate, interacting with other principals, interacting with parents, benefiting students, interest in

better TAKS scores, staff development and changes to the state assessments.

Furthermore, the data show that principals have the best interest of students in mind when making instructional decisions. In addition, principals may be collaborating with each other and with parents.

Federal and State accountability systems mandate the possibility of schools attaining sanctions for low student performance (that include student subgroups) and for having low graduation rates. According to the data obtained for this study, 96% of principals perceived that avoiding sanctions was a factor in making instructional changes.

Principals who support teachers in making instructional changes were better perceived by the teachers, as described in the review of literature. Kaplan and Owings (2001) state that teachers look to principals to assist them in understanding educational expectations and to provide them with the pedagogical tools necessary to help their students be successful. When principals and teachers collaboratively support instructional best practices, high-stakes testing is not an issue. Working to build the capacity of the instructional team leads to increased success in student assessment. When the focus is shifted to instruction rather than high-stakes testing, the results are positive and long-term in nature. Curriculum driven principals view high-stakes testing as a tool to better the curriculum and instruction (DeMoss, 2002). According to Reed et al., (2001), principals from low performing campuses place much more pressure on teachers to improve student performance and are constantly aware of the consequences associated with not meeting state mandated expectations.

The data of this study also reveals principals' interactions with colleagues, parents, and stakeholders were influencing them to make changes to instructional practices. At the school level, challenging goals and effective feedback should be provided, parental and community involvement is critical, and a safe and orderly environment and a positive school culture should be maintained (Marzano, 2003). Positive relationships with staff and stakeholders are critical. These positive relationships are directly correlated with positive student outcomes. In order for these to be effective, fostering buy-in by staff from stakeholders is essential. Transformational leadership lends itself to educators making use of accountability mandates for their own purposes to improve instruction (Leithwood et al., 2002).

It is evident, according to the data of this study, that principals are changing the instructional practices on their campus due to the implementation of TAKS and NCLB. To be effective, leaders need to identify what the focus is going to be and in what order the change will be implemented. Principals have to expect and plan for change. In order to maintain success in this time of high-stakes testing and accountability, leaders need to provide effective leadership and plan accordingly to ensure student success (Waters et al., 2004).

The changes to instructional practices as indicated by principals are in line with the current research about what is instructionally best for students. Effective practices have been identified through research on student learning and student achievement. Research continues to confirm positive results from the use of more progressive teaching strategies brought on by accountability and high stake testing, instead of the continued

use of traditional teaching strategies. Best practices provide better preparation for students to excel in assessments and learning (Marzano, 2003; Zemelman et al., 2005; Downey et al., 2009).

In this study, principals (high school principals) indicated a perceived increase in the use of 17 instructional strategies. A great majority of principals indicated perceived increases in the use of problem-solving activities, open response questions, writing assignments, and creative/critical thinking questions. Most of the principals indicated a perceived decrease in the use of worksheets, true-false questions, and textbook-based assignments.

In terms of teaching techniques, principals indicated a perceived increase in the use of six teaching techniques. These items include peer or cross-age tutoring, interdisciplinary instruction, facilitating/coaching, collaborative/team-teaching, modeling, and cooperative learning/group work. Principals indicated a decrease in the use of lecturing as a teaching technique.

In terms of the instructional materials and tools portion of the survey, principals indicated a perceived increase in the use of twelve instructional materials and tools. A great majority of principals indicated increases in the use of computers/educational software, calculators, computers/internet and/or on-line research service, lab equipment, and manipulatives. Principals indicated a decrease in the use of textbooks as an instructional material and tool.

### Implications for Further Research

Based on the findings of the survey instrument and an examination of the perceptions of high school principals' regarding the impact of a high-stakes accountability system on long-term student learning in Region I and Region XX of the Texas public education system, the following recommendations for further study are provided.

1. The researcher recommends including student subgroup indicators such as socioeconomic status, special education, ethnicity, and limited English proficiency to compare with the decreases or increases in the use of instructional practices. This may reveal differences in how principals perceive the impact of high stake accountability solely for the indicated student groups.
2. The sample size should be increased to include elementary and middle school principals with the Education Service Center Regions I and XX.
3. The sample size should be increased to include multiple Education Service Center Regions especially those regions with school districts along the Texas-Mexico border. A larger database may allow for more far-reaching comparisons.
4. A quantitative analysis, using a prescribed teacher observation system, should be conducted on the correlation between high achieving schools and the increase and or decrease of instructional practices.
5. A qualitative study that involves principal interviews, principal observations, and classroom observations should be included.

6. Teacher perceptions should also be included to determine if they correlate to the principal perceptions of the increases and/or decreases in the use of instructional practices.

Further study based on these suggested recommendations may reveal additional information regarding the student populations in South Texas high schools. Continued monitoring of successful schools and their instructional practices could shed light on the impact of high-stakes testing on student success. The information gained will need to be examined carefully by the researchers and all stakeholders to verify correct implementation of instructional practices leading to student achievement on high-stakes tests.

### Recommendations

The literature review and research findings of this study were used to make the following recommendations.

1. High school principals from acceptable and unacceptable campuses should follow the lead of exemplary and recognized campuses by implementing instructional best practices.
2. Data indicates an increase in the use of instructional best practices; however, this study centered on perceived increases to instructional practices. Principals must receive training on the types and ways to implement instructional best practices for all teachers to better identify and implement instructional practices.

3. Principals with less experience should participate in a mentorship program to learn about the successful instructional practices implemented in exemplary and recognized campuses.
4. Efforts to increase awareness for alternative assessments to measure student progress and growth should be continued.
5. Educators should accept accountability measures, and standardized test results to ensure that all students are learning.

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## APPENDIX A

### Survey Cover Letter and Survey

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3701 Josefina Drive  
Laredo, Texas 78041  
(956) 724-5409  
Jcruz61@stx.rr.com

September 2008

Dear Colleague:

As you are well aware, there have been many significant changes in public education. One of the most important changes has been the No Child Left Behind Act. This act mandates that all states receiving federal funding develop and implement a student assessment system. This assessment system, in the state of Texas is known as the Texas Assessment of Knowledge and Skills (TAKS).

Given the significance of the assessment system, I hope to study the impact of a high stakes accountability system on instructional practices in South Texas for my doctoral research study at Texas A & M University-College Station. This study is the first of its kind in Texas.

As an instructional leader in Region 1 or in Region 20, who has been chosen to receive this online survey, I would truly appreciate it if you could find time to complete the survey. This survey will take 10 minutes of your time. Results of this survey can be used to help our children be academically successful.

As an educator, I know how valuable time is during the year. I appreciate your willingness to participate in the study and your timely completion of the survey. If you should have any question, please feel free to call the phone number or use the email address enclosed. Thank you very much for taking time from your busy schedule to help me in the improvement of student education through this study.

All information obtained from this survey will be confidential.

Sincerely,

Gerardo G. Cruz

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### Survey Instrument Part I

Please circle the response indicating the extent to which you have decreased or increased the use of each of the following instructional practices since the implementation of TAKS and NCLB.

Legend: LD=Large Decrease D= Decrease S=Same I=Increase LI=Large Increase NA=Not applicable

Instructional Strategies						
1. Writing assignments	LD	D	S	I	LI	NA
2. Group projects	LD	D	S	I	LI	NA
3. Text-book based assignments	LD	D	S	I	LI	NA
4. Discussion groups	LD	D	S	I	LI	NA
5. Multiple-choice questions	LD	D	S	I	LI	NA
6. Open response questions	LD	D	S	I	LI	NA
7. True-false questions	LD	D	S	I	LI	NA
8. Use of manipulatives	LD	D	S	I	LI	NA
9. Inquiry/Investigation	LD	D	S	I	LI	NA
10. Problem-solving activities	LD	D	S	I	LI	NA
11. Worksheets	LD	D	S	I	LI	NA
12. Lesson based on current events	LD	D	S	I	LI	NA
13. Project-based assignments	LD	D	S	I	LI	NA
14. Creative/critical thinking questions	LD	D	S	I	LI	NA
15. Role-playing	LD	D	S	I	LI	NA
16. Use of charts, webs, and/or outlines	LD	D	S	I	LI	NA
17. Use of response journals	LD	D	S	I	LI	NA
18. Use of portfolios	LD	D	S	I	LI	NA
19. Use of rubrics or scoring guides	LD	D	S	I	LI	NA
20. Use of exhibitions	LD	D	S	I	LI	NA
Teaching Techniques						
21. Interdisciplinary instruction	LD	D	S	I	LI	NA
22. Lecturing	LD	D	S	I	LI	NA
23. Modeling	LD	D	S	I	LI	NA
24. Cooperative learning/group work	LD	D	S	I	LI	NA
25. Collaborative/team-teaching	LD	D	S	I	LI	NA
26. Peer or cross-age tutoring	LD	D	S	I	LI	NA
27. Facilitating/coaching	LD	D	S	I	LI	NA

<b>Instructional Materials and Tools</b>						
28. Textbooks	LD	D	S	I	LI	NA
29. Reference books	LD	D	S	I	LI	NA
30. Supplementary books	LD	D	S	I	LI	NA
31. Primary source material	LD	D	S	I	LI	NA
32. Newspaper/magazines	LD	D	S	I	LI	NA
33. Audiovisual materials	LD	D	S	I	LI	NA
34. Lab equipment	LD	D	S	I	LI	NA
35. Calculators	LD	D	S	I	LI	NA
36. Computers/educational software	LD	D	S	I	LI	NA
37. Computers/internet and/or on-line research service	LD	D	S	I	LI	NA
38. Manipulatives	LD	D	S	I	LI	NA
39. Maps/globes/atlas	LD	D	S	I	LI	NA
40. Visual aids (e.g. posters, graphs)	LD	D	S	I	LI	NA

## Part II

Please circle the number indicating your responses to the statements below.

Legend: **SD**=Strongly Disagree **D**=Disagree **U**=Undecided **A**=Agree **SA**=Strongly Agree

The following has influenced changes in my instructional practices since the implementation of TAKS and NCLB.

41. Personal desire to make changes	SD	D	U	A	SA
42. Belief that such changes will benefit students	SD	D	U	A	SA
43. Changes in the types of assessment used for school accountability	SD	D	U	A	SA
44. Interest in helping my school improve TAKS scores	SD	D	U	A	SA
45. Interest in helping my students attain TAKS scores that will allow them to graduate	SD	D	U	A	SA
46. Interest in avoiding sanctions at my school	SD	D	U	A	SA
47. Interactions with other school principals	SD	D	U	A	SA
48. Interactions with colleagues	SD	D	U	A	SA
49. Staff development in which I have participated	SD	D	U	A	SA
50. Interactions with parents	SD	D	U	A	SA
51. Curriculum was aligned to coordinate with state standards	SD	D	U	A	SA

**Part III**

Please circle the responses that describe you.

Demographic Data

52. Male or Female

53. Number of Years Teaching Experience?

54. Number of Years in Administration?

55. Number of years in this school as teacher\_\_\_\_\_, as principal\_\_\_\_\_?

56. Level of Education

- a. Master Degree
- b. Doctorate

57. Number of years at current position?

58. Number of years at current school?

59. Your campus rating for 2005? 2006? 2007?

Vogler (2002)

## APPENDIX B

### Electronic Survey Cover Letter

SurveyMonkey - MyCollector: Message Preview

Page 1 of 2

**To:** [Email]

**From:** jcruz61@stx.rr.com

**Subject:** Texas A&M Dissertation Study

**Body:** September 2008

Dear Colleague:

As you are well aware, there have been many significant changes in public education, most significantly the implementation of student assessment systems. This assessment system, in the state of Texas is known as the Texas Assessment of Knowledge and Skills (TAKS).

Given the significance of the assessment system, I hope to study the impact of a high stakes accountability system on instructional practices in South Texas for my doctoral research study at Texas A & M University-College Station. This study is the first of its kind in Texas.

As an instructional leader in Region 1 or in Region 20, who has been chosen to receive this online survey, I would truly appreciate it if you could find time to complete the survey. This survey will take 10 minutes of your time. Results of this survey can be used to help our students be academically successful.

As an educator, I know how valuable time is during the year. I appreciate your willingness to participate in the study and your timely completion of the survey. If you should have any question, please feel free to call the phone number or use the email address enclosed. Thank you very much for taking time from your busy schedule to help me in the improvement of student education through this study.

All information obtained from this survey will be confidential.

Click on the link below to begin the survey.

<https://www.surveymonkey.com/s.aspx>

If you choose not to complete the survey, click on the link below.

<https://www.surveymonkey.com/optout.aspx>

Sincerely,

Gerardo G. Cruz  
956-724-5409  
Jcruz61@stx.rr.com

## APPENDIX C

### Part I Descriptives

Descriptive Statistics					
<i>Item</i>	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Writing Assignments #1	92	1.00	5.00	4.1304	.80134
Group Projects #2	92	2.00	5.00	3.6087	.94876
Textbook-based Assignments #3	92	1.00	4.00	2.3696	.72198
Discussion Groups #4	92	1.00	5.00	3.7391	.86278
Multiple Choice #5	92	2.00	5.00	3.4891	1.06384
Open Response #6	92	1.00	5.00	4.1413	.81983
True False #7	92	1.00	4.00	2.6196	.67681
Manipulatives #8	92	1.00	5.00	3.9565	.83749
Inquiry Investigations #9	92	1.00	5.00	3.9891	.71858
Problemsolving #10	92	1.00	5.00	4.3804	.73891
Worksheets #11	92	1.00	5.00	2.7500	.87235
Current Events #12	92	2.00	5.00	3.7500	.76496
Project-based Assignments #13	92	1.00	5.00	3.5870	.82744
Creative Thinking #14	92	1.00	5.00	4.0326	.89505
Roleplaying #15	91	2.00	5.00	3.3187	.53498
Charts/Webs/Outlines #16	92	1.00	5.00	3.9457	.63530
Journals #17	91	1.00	5.00	3.7253	.85720
Portfolios #18	92	1.00	6.00	3.4783	.97753
Rubrics #19	92	1.00	5.00	3.9457	.63530
Guest Speakers #20	92	1.00	5.00	3.3152	.79738
Interdisciplinary #21	92	1.00	5.00	3.7609	.84346
Lecturing #22	92	1.00	4.00	2.2500	.58601
Modeling #23	91	1.00	5.00	3.3626	.72290
Cooperative Learning #24	92	1.00	5.00	3.3261	.91518
Collaborative Teaching #25	91	1.00	5.00	3.6264	.70943
Peer Tutoring #26	92	2.00	6.00	3.8261	.67301
Facilitating #27	92	3.00	5.00	3.6957	.52913
Textbooks #28	92	1.00	4.00	2.6304	.67478
Reference Books #29	92	1.00	5.00	3.1630	.81574
Supplementary Books #30	92	1.00	5.00	3.6413	.68871
Primary Sources #31	83	2.00	5.00	3.2169	.78162
Newspapers #32	92	1.00	5.00	3.3152	.90091
Audiovisuals #33	92	1.00	5.00	3.6196	.78225
Lab Equipment #34	91	1.00	5.00	4.2198	.69606
Calculators #35	91	1.00	5.00	4.3626	.75302
Computers #36	91	1.00	5.00	4.5714	.80475
Internet #37	90	1.00	5.00	4.2556	.89394
Use of Manipulatives #38	91	1.00	5.00	4.1099	.88758
Maps/Globes #39	91	1.00	5.00	3.3956	.69728
Visual Aids #40	91	1.00	5.00	3.6923	.77017
Valid N (listwise)	77				



## APPENDIX D

### Part I Frequency Counts Frequency Tables

Writing Assignments #1					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	2	2.2	2.2	3.3
	Same	12	13.0	13.0	16.3
	Increase	46	50.0	50.0	66.3
	Large Increase	31	33.7	33.7	100.0
	Total	92	100.0	100.0	

Group Projects #2					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Decrease	14	15.2	15.2	15.2
	Same	24	26.1	26.1	41.3
	Increase	38	41.3	41.3	82.6
	Large Increase	16	17.4	17.4	100.0
	Total	92	100.0	100.0	

Textbook-based Assignments #3					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	11	12.0	12.0	12.0
	Decrease	38	41.3	41.3	53.3
	Same	41	44.6	44.6	97.8
	Increase	2	2.2	2.2	100.0
	Total	92	100.0	100.0	

Discussion Groups #4					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	6	6.5	6.5	7.6
	Same	25	27.2	27.2	34.8
	Increase	44	47.8	47.8	82.6
	Large Increase	16	17.4	17.4	100.0
	Total	92	100.0	100.0	

Multiple Choice #5					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Decrease	19	20.7	20.7	20.7
	Same	30	32.6	32.6	53.3
	Increase	22	23.9	23.9	77.2
	Large Increase	21	22.8	22.8	100.0
	Total	92	100.0	100.0	

Open Response #6					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	2	2.2	2.2	3.3
	Same	13	14.1	14.1	17.4
	Increase	43	46.7	46.7	64.1
	Large Increase	33	35.9	35.9	100.0
	Total	92	100.0	100.0	

True False #7					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	2	2.2	2.2	2.2
	Decrease	39	42.4	42.4	44.6
	Same	43	46.7	46.7	91.3
	Increase	8	8.7	8.7	100.0
	Total	92	100.0	100.0	

Manipulatives #8					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	1	1.1	1.1	2.2
	Same	25	27.2	27.2	29.3
	Increase	39	42.4	42.4	71.7
	Large Increase	26	28.3	28.3	100.0
	Total	92	100.0	100.0	

Inquiry Investigations #9					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	2	2.2	2.2	3.3
	Same	12	13.0	13.0	16.3
	Increase	59	64.1	64.1	80.4
	Large Increase	18	19.6	19.6	100.0
	Total	92	100.0	100.0	

Problem Solving #10					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	2	2.2	2.2	3.3
	Same	2	2.2	2.2	5.4
	Increase	43	46.7	46.7	52.2
	Large Increase	44	47.8	47.8	100.0
	Total	92	100.0	100.0	

Worksheets #11					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	2	2.2	2.2	2.2
	Decrease	37	40.2	40.2	42.4
	Same	41	44.6	44.6	87.0
	Increase	6	6.5	6.5	93.5
	Large Increase	6	6.5	6.5	100.0
	Total	92	100.0	100.0	

Current Events #12					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Decrease	5	5.4	5.4	5.4
	Same	26	28.3	28.3	33.7
	Increase	48	52.2	52.2	85.9
	Large Increase	13	14.1	14.1	100.0
	Total	92	100.0	100.0	

Project-based Assignments #13					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	5	5.4	5.4	5.4
	Decrease	2	2.2	2.2	7.6
	Same	22	23.9	23.9	31.5
	Increase	60	65.2	65.2	96.7
	Large Increase	3	3.3	3.3	100.0
	Total	92	100.0	100.0	

Creative Thinking #14					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	2	2.2	2.2	2.2
	Decrease	6	6.5	6.5	8.7
	Same	5	5.4	5.4	14.1
	Increase	53	57.6	57.6	71.7
	Large Increase	26	28.3	28.3	100.0
	Total	92	100.0	100.0	

Role-playing #15					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Decrease	2	2.2	2.2	2.2
	Same	59	64.1	64.8	67.0
	Increase	29	31.5	31.9	98.9
	Large Increase	1	1.1	1.1	100.0
	Total	91	98.9	100.0	
Missing	System	1	1.1		
Total		92	100.0		

Charts/Webb/Outlines #16					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	4	4.3	4.3	5.4
	Same	3	3.3	3.3	8.7
	Increase	75	81.5	81.5	90.2
	Large Increase	9	9.8	9.8	100.0
	Total	92	100.0	100.0	

Journals #17					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	4	4.3	4.4	4.4
	Same	25	27.2	27.5	31.9
	Increase	50	54.3	54.9	86.8
	Large Increase	12	13.0	13.2	100.0
	Total	91	98.9	100.0	
Missing	System	1	1.1		
Total		92	100.0		

Portfolios #18					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	5	5.4	5.4	5.4
	Decrease	3	3.3	3.3	8.7
	Same	40	43.5	43.5	52.2
	Increase	32	34.8	34.8	87.0
	Large Increase	11	12.0	12.0	98.9
	Not Applicable	1	1.1	1.1	100.0
	Total	92	100.0	100.0	

Rubrics #19					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Same	15	16.3	16.3	17.4
	Increase	63	68.5	68.5	85.9
	Large Increase	13	14.1	14.1	100.0
	Total	92	100.0	100.0	

Guest Speakers #20					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	5	5.4	5.4	5.4
	Decrease	2	2.2	2.2	7.6
	Same	46	50.0	50.0	57.6
	Increase	37	40.2	40.2	97.8
	Large Increase	2	2.2	2.2	100.0
	Total	92	100.0	100.0	

Interdisciplinary #21					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	4	4.3	4.3	4.3
	Same	22	23.9	23.9	28.3
	Increase	54	58.7	58.7	87.0
	Large Increase	12	13.0	13.0	100.0
	Total	92	100.0	100.0	

Lecturing #22					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	3	3.3	3.3	3.3
	Decrease	67	72.8	72.8	76.1
	Same	18	19.6	19.6	95.7
	Increase	4	4.3	4.3	100.0
	Total	92	100.0	100.0	

Modeling #23					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	7	7.6	7.7	8.8
	Same	44	47.8	48.4	57.1
	Increase	36	39.1	39.6	96.7
	Large Increase	3	3.3	3.3	100.0
	Total	91	98.9	100.0	
Missing	System	1	1.1		
Total		92	100.0		

Cooperative Learning #24					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	16	17.4	17.4	18.5
	Same	36	39.1	39.1	57.6
	Increase	30	32.6	32.6	90.2
	Large Increase	9	9.8	9.8	100.0
	Total	92	100.0	100.0	

Collaborative Teaching #25					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	5	5.4	5.5	6.6
	Same	25	27.2	27.5	34.1
	Increase	56	60.9	61.5	95.6
	Large Increase	4	4.3	4.4	100.0
	Total	91	98.9	100.0	
Missing	System	1	1.1		
Total		92	100.0		

Peer Tutoring #26					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Decrease	1	1.1	1.1	1.1
	Same	26	28.3	28.3	29.3
	Increase	54	58.7	58.7	88.0
	Large Increase	10	10.9	10.9	98.9
	Not Applicable	1	1.1	1.1	100.0
	Total	92	100.0	100.0	

Facilitating #27					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Same	31	33.7	33.7	33.7
	Increase	58	63.0	63.0	96.7
	Large Increase	3	3.3	3.3	100.0
	Total	92	100.0	100.0	

Textbooks #28					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	4	4.3	4.3	4.3
	Decrease	32	34.8	34.8	39.1
	Same	50	54.3	54.3	93.5
	Increase	6	6.5	6.5	100.0
	Total	92	100.0	100.0	

Reference Books #29					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	4	4.3	4.3	4.3
	Decrease	10	10.9	10.9	15.2
	Same	47	51.1	51.1	66.3
	Increase	29	31.5	31.5	97.8
	Large Increase	2	2.2	2.2	100.0
	Total	92	100.0	100.0	

Supplementary Books #30					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	1	1.1	1.1	2.2
	Same	35	38.0	38.0	40.2
	Increase	48	52.2	52.2	92.4
	Large Increase	7	7.6	7.6	100.0
	Total	92	100.0	100.0	

Primary Sources #31					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Decrease	13	14.1	15.7	15.7
	Same	44	47.8	53.0	68.7
	Increase	21	22.8	25.3	94.0
	Large Increase	5	5.4	6.0	100.0
	Total	83	90.2	100.0	
Missing	System	9	9.8		
Total		92	100.0		

Newspapers #32					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	5	5.4	5.4	5.4
	Decrease	11	12.0	12.0	17.4
	Same	27	29.3	29.3	46.7
	Increase	48	52.2	52.2	98.9
	Large Increase	1	1.1	1.1	100.0
	Total	92	100.0	100.0	

Audiovisuals #33					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Same	46	50.0	50.0	51.1
	Increase	31	33.7	33.7	84.8
	Large Increase	14	15.2	15.2	100.0
	Total	92	100.0	100.0	

Lab Equipment #34					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Same	8	8.7	8.8	9.9
	Increase	51	55.4	56.0	65.9
	Large Increase	31	33.7	34.1	100.0
	Total	91	98.9	100.0	
Missing	System	1	1.1		
Total		92	100.0		

Calculators #35					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Same	9	9.8	9.9	11.0
	Increase	36	39.1	39.6	50.5
	Large Increase	45	48.9	49.5	100.0
	Total	91	98.9	100.0	
Missing	System	1	1.1		
Total		92	100.0		

Computers #36					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	4	4.3	4.4	5.5
	Increase	23	25.0	25.3	30.8
	Large Increase	63	68.5	69.2	100.0
	Total	91	98.9	100.0	
Missing	System	1	1.1		
Total		92	100.0		

Internet #37					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	4	4.3	4.4	5.6
	Same	9	9.8	10.0	15.6
	Increase	33	35.9	36.7	52.2
	Large Increase	43	46.7	47.8	100.0
	Total	90	97.8	100.0	
Missing	System	2	2.2		
Total		92	100.0		

Use of Manipulatives #38					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	5	5.4	5.5	6.6
	Same	10	10.9	11.0	17.6
	Increase	42	45.7	46.2	63.7
	Large Increase	33	35.9	36.3	100.0
	Total	91	98.9	100.0	
Missing	System	1	1.1		
Total		92	100.0		



Maps/Globes #39					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	7	7.6	7.7	8.8
	Same	39	42.4	42.9	51.6
	Increase	43	46.7	47.3	98.9
	Large Increase	1	1.1	1.1	100.0
	Total	91	98.9	100.0	
Missing	System	1	1.1		
Total		92	100.0		

Visual Aids #40					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Large Decrease	1	1.1	1.1	1.1
	Decrease	4	4.3	4.4	5.5
	Same	27	29.3	29.7	35.2
	Increase	49	53.3	53.8	89.0
	Large Increase	10	10.9	11.0	100.0
	Total	91	98.9	100.0	
Missing	System	1	1.1		
Total		92	100.0		

## APPENDIX E

### Part II Influence Factors Descriptives

Descriptive Statistics					
	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
<b>Visual Aids #40</b>	91	1.00	5.00	3.6923	.77017
<b>Desire to Change #41</b>	91	2.00	5.00	4.1538	.68188
<b>Changes Benefit Students #42</b>	91	1.00	5.00	4.0989	.86993
<b>Changes In Assessments #43</b>	91	3.00	5.00	4.1538	.57587
<b>Improve TAKS Scores #44</b>	91	4.00	5.00	4.6264	.48645
<b>Allow to Graduate #45</b>	91	4.00	5.00	4.6374	.48342
<b>Avoiding Sanctions #46</b>	91	1.00	5.00	4.2418	.67232
<b>Interactions With Principals #47</b>	91	2.00	5.00	3.8571	.96115
<b>Interactions With Colleagues #48</b>	91	2.00	5.00	4.1538	.69798
<b>Staff Development #49</b>	91	2.00	5.00	4.2418	.73546
<b>Interactions With Parents #50</b>	91	2.00	5.00	3.9451	.80778
<b>Aligned Curriculum #51</b>	91	1.00	5.00	4.3297	.59731
<b>Valid N (listwise)</b>	91				

## APPENDIX F

### Part II Influence Factors Frequency Counts Frequency Tables

Desire to Change #41					
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<b>Valid</b>	<b>Disagree</b>	4	4.3	4.4	4.4
	<b>Undecided</b>	3	3.3	3.3	7.7
	<b>Agree</b>	59	64.1	64.8	72.5
	<b>Strongly Agree</b>	25	27.2	27.5	100.0
	<b>Total</b>	91	98.9	100.0	
<b>Missing</b>	<b>System</b>	1	1.1		
<b>Total</b>		92	100.0		

Changes Benefit Students #42					
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<b>Valid</b>	<b>Strongly Disagree</b>	5	5.4	5.5	5.5
	<b>Agree</b>	62	67.4	68.1	73.6
	<b>Strongly Agree</b>	24	26.1	26.4	100.0
	<b>Total</b>	91	98.9	100.0	
<b>Missing</b>	<b>System</b>	1	1.1		
<b>Total</b>		92	100.0		

Changes In Assessments #43					
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<b>Valid</b>	<b>Undecided</b>	9	9.8	9.9	9.9
	<b>Agree</b>	59	64.1	64.8	74.7
	<b>Strongly Agree</b>	23	25.0	25.3	100.0
	<b>Total</b>	91	98.9	100.0	
<b>Missing</b>	<b>System</b>	1	1.1		
<b>Total</b>		92	100.0		

Improve TAKS Scores #44					
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<b>Valid</b>	<b>Agree</b>	34	37.0	37.4	37.4
	<b>Strongly Agree</b>	57	62.0	62.6	100.0
	<b>Total</b>	91	98.9	100.0	
<b>Missing</b>	<b>System</b>	1	1.1		
<b>Total</b>		92	100.0		

Allow to Graduate #45					
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<b>Valid</b>	<b>Agree</b>	33	35.9	36.3	36.3
	<b>Strongly Agree</b>	58	63.0	63.7	100.0
	<b>Total</b>	91	98.9	100.0	
<b>Missing</b>	<b>System</b>	1	1.1		
<b>Total</b>		92	100.0		

Avoiding Sanctions #46					
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<b>Valid</b>	<b>Strongly Disagree</b>	1	1.1	1.1	1.1
	<b>Disagree</b>	2	2.2	2.2	3.3
	<b>Agree</b>	59	64.1	64.8	68.1
	<b>Strongly Agree</b>	29	31.5	31.9	100.0
	<b>Total</b>	91	98.9	100.0	
<b>Missing</b>	<b>System</b>	1	1.1		
<b>Total</b>		92	100.0		

Interactions With Principals #47					
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<b>Valid</b>	<b>Disagree</b>	14	15.2	15.4	15.4
	<b>Undecided</b>	7	7.6	7.7	23.1
	<b>Agree</b>	48	52.2	52.7	75.8
	<b>Strongly Agree</b>	22	23.9	24.2	100.0
	<b>Total</b>	91	98.9	100.0	
<b>Missing</b>	<b>System</b>	1	1.1		
<b>Total</b>		92	100.0		

Interactions With Colleagues #48					
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<b>Valid</b>	<b>Disagree</b>	5	5.4	5.5	5.5
	<b>Undecided</b>	1	1.1	1.1	6.6
	<b>Agree</b>	60	65.2	65.9	72.5
	<b>Strongly Agree</b>	25	27.2	27.5	100.0
	<b>Total</b>	91	98.9	100.0	
<b>Missing</b>	<b>System</b>	1	1.1		
<b>Total</b>		92	100.0		

Staff Development #49					
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<b>Valid</b>	<b>Disagree</b>	1	1.1	1.1	1.1
	<b>Undecided</b>	13	14.1	14.3	15.4
	<b>Agree</b>	40	43.5	44.0	59.3
	<b>Strongly Agree</b>	37	40.2	40.7	100.0
	<b>Total</b>	91	98.9	100.0	
<b>Missing</b>	<b>System</b>	1	1.1		
<b>Total</b>		92	100.0		

Interactions With Parents #50					
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<b>Valid</b>	<b>Disagree</b>	9	9.8	9.9	9.9
	<b>Undecided</b>	5	5.4	5.5	15.4
	<b>Agree</b>	59	64.1	64.8	80.2
	<b>Strongly Agree</b>	18	19.6	19.8	100.0
	<b>Total</b>	91	98.9	100.0	
<b>Missing</b>	<b>System</b>	1	1.1		
<b>Total</b>		92	100.0		

<b>Aligned Curriculum #51</b>					
		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
<b>Valid</b>	<b>Strongly Disagree</b>	1	1.1	1.1	1.1
	<b>Agree</b>	57	62.0	62.6	63.7
	<b>Strongly Agree</b>	33	35.9	36.3	100.0
	<b>Total</b>	91	98.9	100.0	
<b>Missing</b>	<b>System</b>	1	1.1		
<b>Total</b>		92	100.0		

**VITA**

Name: Gerardo G. Cruz

Address: Department of Educational Administration and Human Development  
Texas A & M University  
4226 TAMU  
College Station, Texas 77843-4226

Email  
Address: Jcruz61@stx.rr.com

Education: B.S., Biology, Texas A&M International University, 1996  
  
M.Ed., Educational Administration, Texas A&M International University, 2002  
  
Ph.D., Educational Administration, Texas A&M University, 2009

Professional Experience: Director of Secondary Education Laredo ISD, Laredo, Texas July 2007- Present  
  
Science Dean, Laredo ISD, Laredo, Texas July 2006- July 2007  
  
Principal, Dr. Joaquin Cigarroa Middle School, Laredo, Texas Aug 2005- June 2006  
  
Program Evaluator, Laredo ISD, Laredo, Texas July 2005- August 2005  
  
Instructional Coordinator, Laredo ISD, Laredo, Texas July 2004- June 2005  
  
Science Coordinator Laredo ISD, Laredo, Texas Aug 2002- June 2004  
  
Biology Teacher, J.W. Nixon High School, Laredo, Texas 1997-2002